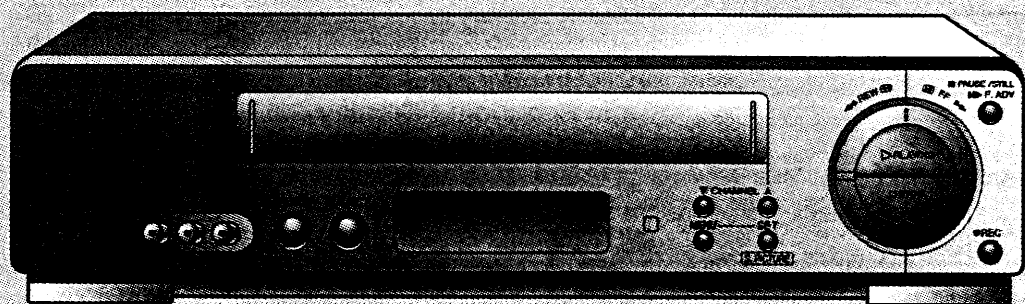


SHARP®

MODEL
VC-A260X
VC-A460X
VC-H660X

**VIDEO CASSETTE RECORDER
OPERATION MANUAL**

G-CODE®



(This picture is for VC-H660X.)

MID-DRIVE

VHS HQ HIGH QUALITY
PAL



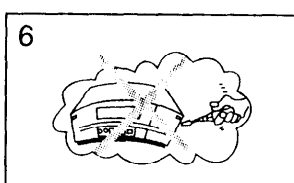
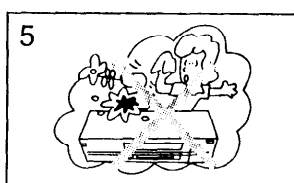
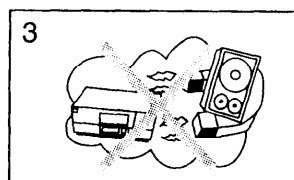
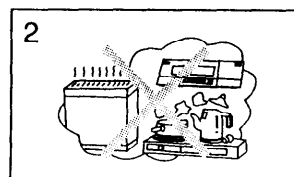
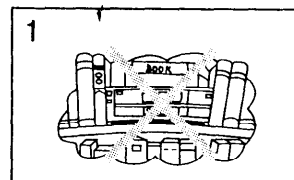
IMPORTANT SAFEGUARDS AND PRECAUTIONS

CAUTION

BEFORE OPERATING YOUR NEW VCR, PLEASE CAREFULLY READ THIS OPERATION MANUAL AND THEN SAVE IT FOR FUTURE REFERENCE AS IT WILL BE USEFUL IF YOU HAVE ANY PROBLEMS OPERATING YOUR VCR IN THE FUTURE.

Location and Handling

1. Air vents are provided in the VCR cabinet to prevent excessive temperatures inside the unit. Do not place your VCR in closed spaces, cover it, or otherwise block the vents.
2. Do not place the VCR in direct sunlight, or near heat sources.
3. Keep the VCR and tapes away from strong magnetic objects.
4. Do not insert or drop anything into the VCR through the air vents or cassette compartment as this could cause serious damage, possibly resulting in fire.
5. Do not place any object containing water or other liquids on the VCR. In the event that liquid should enter the cabinet, unplug the VCR immediately and contact the retailer or a service centre approved by Sharp immediately.
6. Do not remove the VCR cabinet. Touching parts inside the cabinet could result in electric shock and/or damage to the VCR. For service and adjustment inside the cabinet, call a qualified dealer or service centre approved by Sharp.
7. The use of head cleaning tapes is not recommended as they may cause damage to your machine.



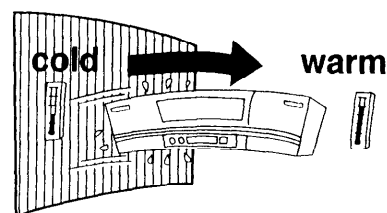
Caution—Prevent Condensation

When moving the VCR from a cold place to a warm one, condensation (dew) is likely to form on the VCR drum and heads.

If you try to play back or record in these circumstances, the videotape and VCR may be damaged.

To prevent this, turn the power switch on and wait for a few hours for the VCR to warm up and dry before attempting playback or recording.

This is particularly important before loading a cassette for the first time after purchasing the VCR.





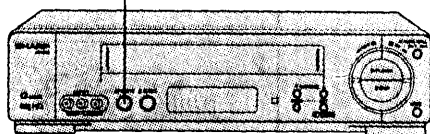
Service

Do not attempt to service this VCR yourself. Please carry out the user checks on page 37. If you still experience a problem, contact your dealer or nearest Sharp service facility.

Others

Copyright may exist in material you wish to record. Copying such material without permission of the relevant licensee(s) or owner(s) of the copyright is prohibited by law. SHARP is not in a position to authorize the recording of copyright works and nothing in this manual should be read or implied as giving that authority.

OPERATE button (turns VCR on/off)
Clock display will work regardless of this button.



This picture is for VC-H660X

This VCR is not equipped with a mains power switch. Accordingly, nominal current to drive the clock is drawn at all times when the AC power cord is plugged into a wall socket. If the VCR is not to be used for an extended period, be sure to unplug the cord.



Features

ONLY FOR VC-H660X

• VHS Hi-Fi Stereo Sound/IGR System/• Audio Dubbing

COMMON FEATURES

- **G-CODE*** for Instant Video Programme System
- **MID-Drive (New Centre-Mounted Mechanism)**
- **HQ (High Quality) Circuitry**
- **Multi Language On Screen Display (English, French, Spanish, Chinese)**
- **New Sharp Super Picture** — Enhances picture quality during playback.
- **OSD (On Screen Display) with Menu Screen Guidance**
- **DPSS (Digital Programme Search System)**
- **Quick Start with Full Loading Mechanism**
- **365-Day, 8-Programme Timer (Daily/Weekly Programmable)**
- **Auto Channel Tuning**
- **48-Channel Preset PLL Frequency Synthesized Tuner**

* G-CODE® is a trademark of Gemstar Development Corporation. The G-CODE® System is manufactured under license from Gemstar Development Corporation.

POWER SUPPLY:

The voltage supply of this VCR is AC 240 V, 50 Hz.



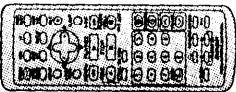
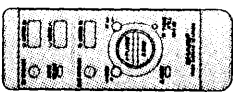
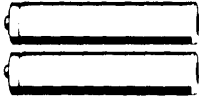
CASSETTE TAPE:

This VCR uses **VHS** standard video signals. Use only video cassette tapes that carry the **VHS** mark.



Accessories

Be sure that the following accessories are all included with your VCR.

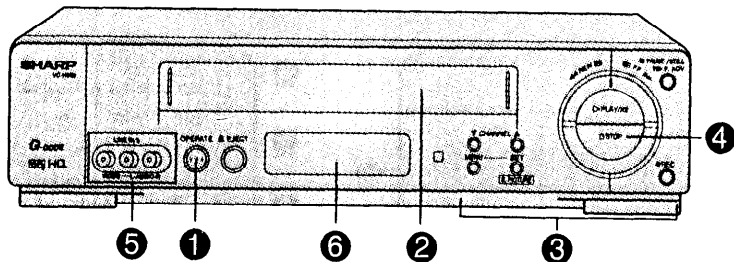
	Remote control unit			
	VC-A260X	VC-A460X	VC-H660X	
 Coaxial cable (TV-VCR cable)				 Two (R6 UM/SUM-3 or AA) batteries for the remote control unit



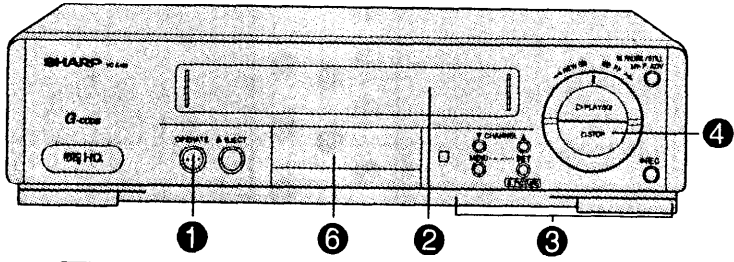
Major Components of Your VCR

Front

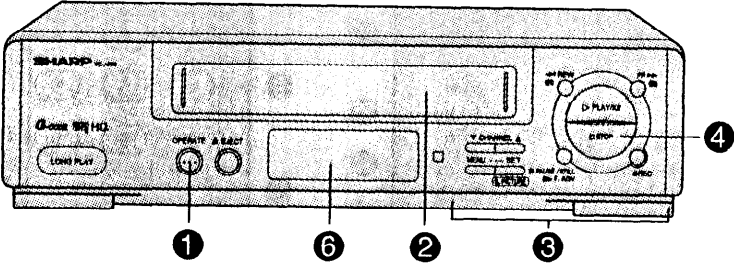
(VC-H660X)



(VC-A460X)



(VC-A260X)

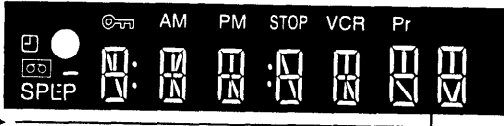


- 1 **OPERATE** button (turns VCR on/off)
Clock display will work regardless of this button.
- 2 Cassette compartment (See **Playback, Recording.**)
- 3 Basic function controls (See **Playback, Recording.**)
Channel tuning controls (See **Setting the Channels.**)
- 4 When pressed;
 - Stops the tape during Playback, FF, REW or REC.

Only for VC-H660X

- 5 Front AV jack (LINE IN 2: VIDEO, AUDIO)

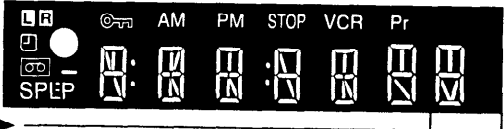
6 **VCR Display** (explained throughout the operation instructions)
(VC-A260X, VC-A460X)



NOTE

- When the VCR is ON, this indicator (where a channel position number is usually displayed) will light up. When the power is OFF, this part will not be lit.

(VC-H660X)



NOTE

- When the VCR is ON, this indicator (where a channel position number is usually displayed) will light up. When the power is OFF, this part will not be lit.

	Cassette-In Indicator	S L O W	Slow	Only for VC-H660X	
	Play/Double speed playback	• R E C	Record (When operating mode is displayed)		Audio Output mode
	Rewind	• P A U S E	Rec Pause		Video Search Rewind
	Fast Forward	S T O P	Stop		Video Search Forward
	Still/ Frame Advance		Recording with the timer/ Simple Recording timer		New Child-Proof lock
	When AC power cord is first plugged in.	●	Recording mark		

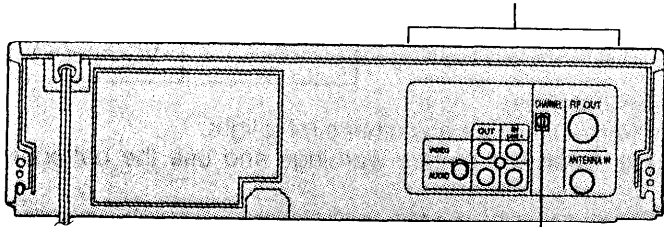
NOTE

- The display changes each time the **DISPLAY** button on the remote control is pressed. (See page 35.)

Rear

(VC-A260X, VC-A460X)

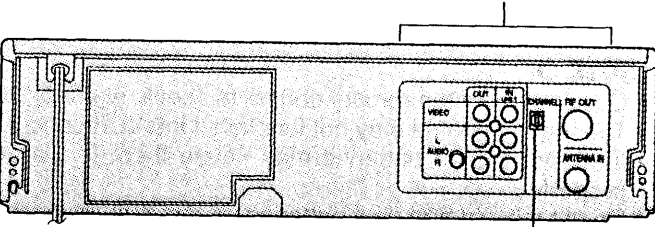
Connection terminals (See **CONNECTIONS** on page 8.)



RF converter output channel (CHANNEL) adjuster (UHF channel 31 to 40)

(VC-H660X)

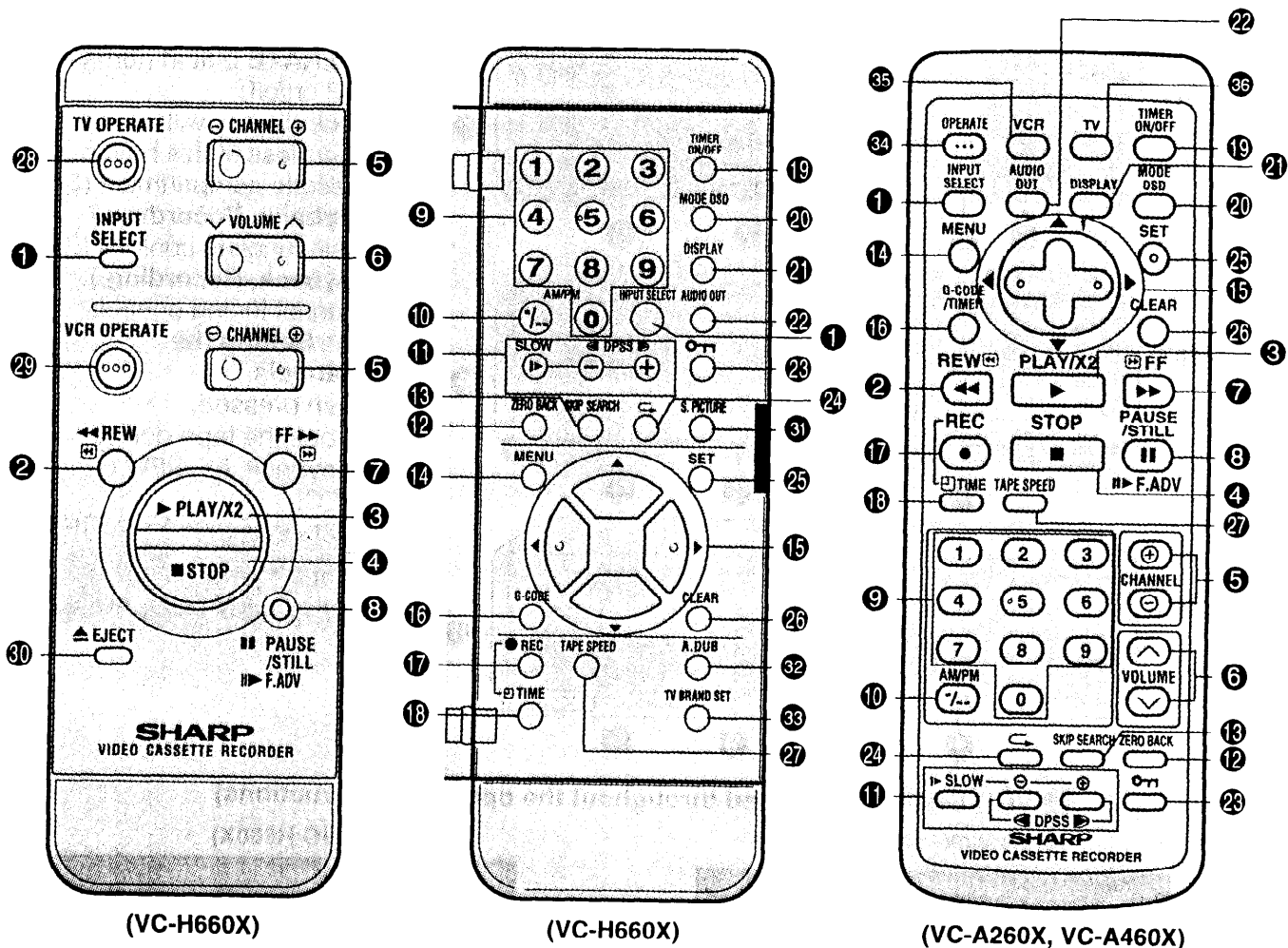
Connection terminals (See **CONNECTIONS** on page 8.)



RF converter output channel (CHANNEL) adjuster (UHF channel 31 to 40)



Remote Control



- | | | | | |
|---|--|--|---|---|
| <p>1 INPUT SELECT button</p> <p>2 REW button</p> <p>3 PLAY/x2 button</p> <p>4 STOP button</p> <p>5 CHANNEL +/− button</p> <p>6 VOLUME ^/v button</p> <p>7 FF button</p> <p>8 PAUSE/STILL, F. ADV button</p> <p>9 Numeric buttons</p> <p>10 AM/PM button</p> | <p>Digit select (When inputting up to two digit numbers)</p> <p>11 SLOW/+/− buttons (SLOW +/−, DPSS +/−)</p> <p>12 ZERO BACK button</p> <p>13 SKIP SEARCH button</p> <p>14 MENU button</p> <p>15 ◀/▶/▲/▼ button</p> <p>16 G-CODE button (G-CODE/TIMER button for VC-</p> | <p>A260X, VC-A460X)</p> <p>17 REC button</p> <p>18 TIME button</p> <p>19 TIMER ON/OFF button</p> <p>20 MODE OSD button</p> <p>21 DISPLAY button</p> <p>22 AUDIO OUT button</p> | <p>23 Child-proof Lock button (New Child-proof Lock)</p> <p>24 REVIEW SEARCH button</p> <p>25 SET button</p> <p>26 CLEAR button</p> <p>27 TAPE SPEED button</p> | <p>31 S. PICTURE button</p> <p>32 A. DUB button</p> <p>33 TV BRAND SET button</p> |
|---|--|--|---|---|
- NOTE**
- AUDIO OUT is printed on the remote control for VC-A260X, VC-A460X however this function does not operate.
- Only for VC-A260X, VC-A460X**
- 34 OPERATE button
 - 35 VCR button
 - 36 TV button
- Only for VC-H660X**
- 28 TV OPERATE button
 - 29 VCR OPERATE button
 - 30 EJECT button

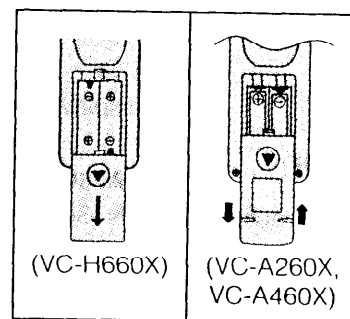
Inserting the Batteries

First, install the batteries properly. Fit two R6 (UM/SUM-3, AA) 1.5 volt batteries (included) or equivalent. If the remote control stops working, insert new batteries.

Ensure the batteries are inserted correctly, matching the polarities (+/−) indicated in the remote control.

NOTE

- Do not subject the remote control to shock, water or excessive humidity.
- The remote control may not function if the VCR sensor is in direct sunlight or any other strong light.
- Incorrect use of batteries may cause them to leak or burst. Read the battery warnings and use the batteries properly.
- Do not mix old and new batteries, or mix brands in use.
- Remove the batteries if you will not use the remote control for an extended period of time.





Using the Remote Control for TV Operation

The provided remote control can operate the basic functions of your television. In addition to most Sharp televisions, other manufacturers' televisions listed below can also be controlled by setting the remote control to the corresponding TV brand. The remote control's default brand is "SHARP", which enables control of most Sharp televisions. When you replace the batteries in the Remote Control, the control's TV brand setting will be reset to SHARP.

Setting the TV Brand

- 1 Turn on your TV.
- 2 Press the **OPERATE** (for VC-A260X, VC-A460X)/ **TV BRAND SET** (for VC-H660X) button and the button simultaneously which corresponds to the brand of your TV. Hold the button down for about one second.
Refer to the table of brands below.
When setting is complete, the remote control will send a "power off" signal (⏻) to the TV, and it should turn off.

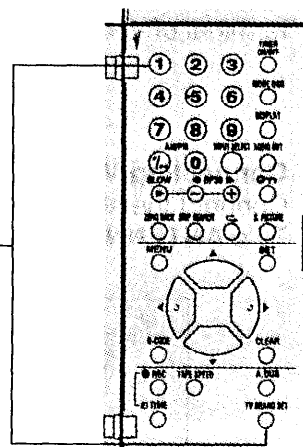
NOTE

- If the TV does not turn off in step 2, repeat the step 2 setting procedure and select the button for a different brand.

TV BRAND NAME	Corresponding button	TV BRAND NAME	Corresponding button
SHARP	1	GRAETZ	7
PHILIPS	2	LUXOR	7
THOMSON	3 or 4	SALORA	7
TELEFUNKEN	3 or 4	SELECO	7
NORDMEND	3 or 4	SONY	8
BRANDT	3 or 4	TOSHIBA	9
SABA	3 or 4	PANASONIC	0 or +/-
TELAVIA	3 or 4		
GRUNDIG	5	VC-A260X VC-A460X	VC-H660X
BLAUPUNKT	5	SANYO	VOLUME ∇
FERGUSON	6	HITACHI	INPUT SELECT
ITT NOKIA	7	MITSUBISHI	CHANNEL ⏮
		JVC	CHENNEL ⏭
			DISPLAY

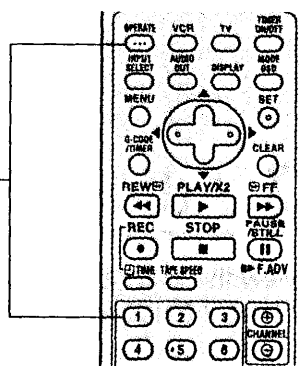
(For example)
TV brand: SHARP
(Corresponding button is "1")

Press these buttons simultaneously and hold for more than 1 second.



(VC-H660X)

Press these buttons simultaneously and hold for more than 1 second.



(VC-A260X, VC-A460X)

TV Functions to be Controlled

Only for VC-A260X, VC-A460X

Switch to TV control mode.

- Press the **TV** button to select the TV control mode.

TV function control

- 1 Press the **TV** button to select the TV control mode.
- 2 Use the following buttons on your remote control to operate your TV set.

TV function

- TV POWER (⏻)
- TV CHANNEL UP/DOWN
- TV VOLUME UP/DOWN
- INPUT SELECT button (TV-AV selector)

- 3 Press the **VCR** button to return to the VCR control mode.

Only for VC-H660X

- You can operate TV POWER (⏻), TV CHANNEL UP/DOWN, TV VOLUME UP/DOWN, INPUT SELECT (TV-AV selection) directly.

Return to VCR control mode.

- Press the **VCR** button to select the VCR control mode.

NOTE

- When you replace the batteries in the remote control, if your television is not a Sharp model you must reset the TV brand.
- If the MENU, PLAY, STOP, FF or REW buttons are pressed in the TV control mode, the VCR will return to VCR control mode.

IMPORTANT NOTE:

Although the provided remote control unit is compatible with most SHARP televisions, as well as many TV models manufactured by others, it is possible that the provided remote control will not work with your TV, or will control only some of the functions.

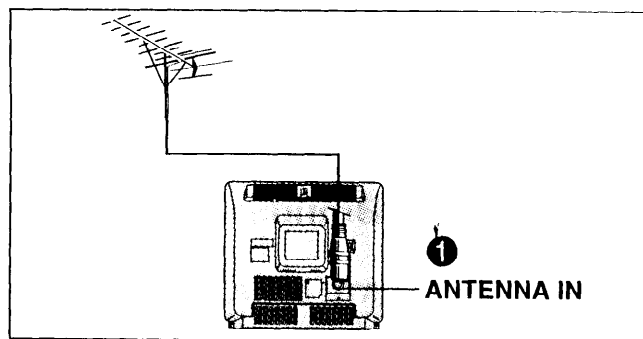
If the button listed in the table does not work with your TV set, you may want to try another; occasionally, models vary within a brand.

Consequently, Sharp's warranty does not cover all of the models under the brands listed in the table.

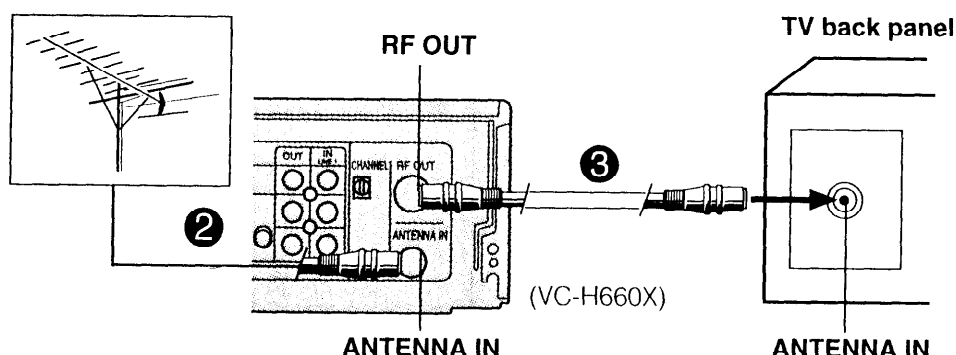


Connections

- ❶ **Disconnecting TV Cable**
Disconnect the aerial cable from the back of your TV set.
- ❷ **Connecting Aerial Cable to VCR**
Connect the aerial cable to the **ANTENNA IN** terminal of your VCR.



- ❸ **Connecting VCR to TV**
Connect the supplied coaxial cable to the **RF OUT** terminal of the VCR. Plug the other end into your TV's **ANTENNA IN** terminal.



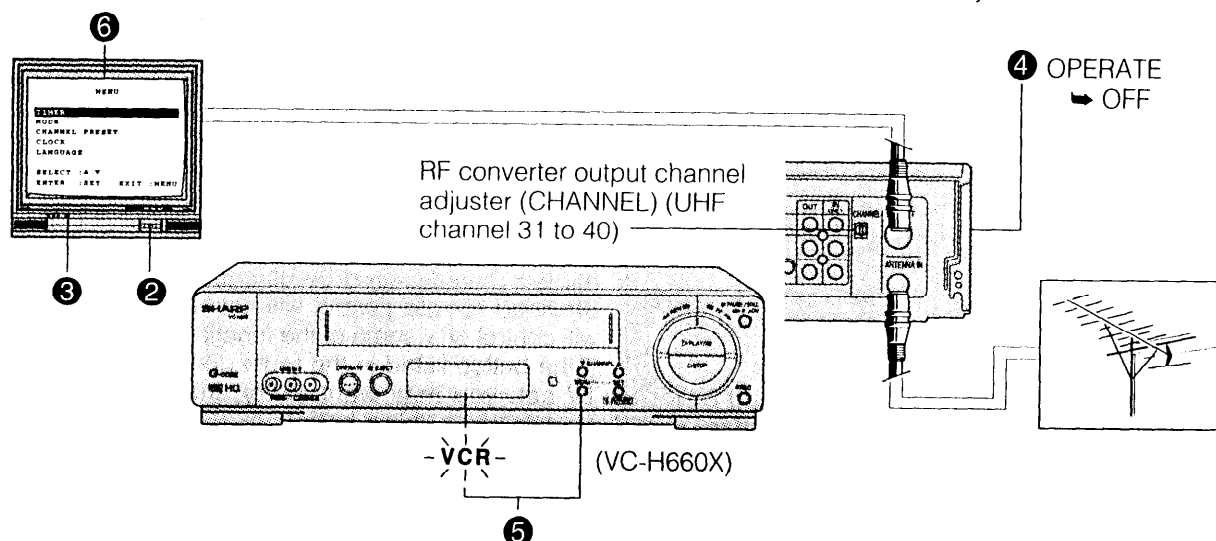
Adjusting the Video Channel

To view the output of your VCR on the television screen, you must select an unused channel on your TV and tune it to the output of your VCR (factory preset to UHF channel 37).

- ❶ Make sure both units (TV and VCR) are connected (Power cord) to the power point.
- ❷ Turn on your TV.
- ❸ Select an unused channel on your TV.
- ❹ Set the power on the VCR to off. (If the VCR is ON, press the **OPERATE** button to turn off the power.)
- ❺ Keep pressing the **MENU** button for more than two seconds to light up the "VCR" on the VCR display.
- ❻ Adjust the tuning of the selected TV channel until the MENU pattern appears on your TV screen. (Refer to your TV operation Manual for Tuning procedures)

NOTE

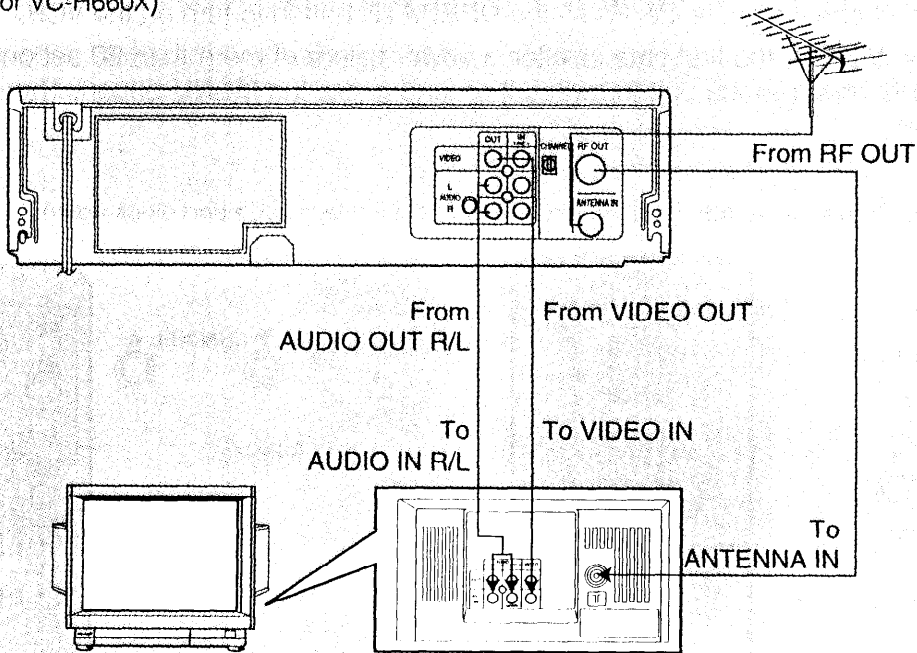
- If interference or a beat pattern is received when the test pattern is tuned in, use a small screwdriver to turn the RF converter output channel adjuster (CHANNEL) (UHF channel 31 to 40).





Connecting to a Stereo TV (Only for VC-H660X)

(This picture is for VC-H660X)



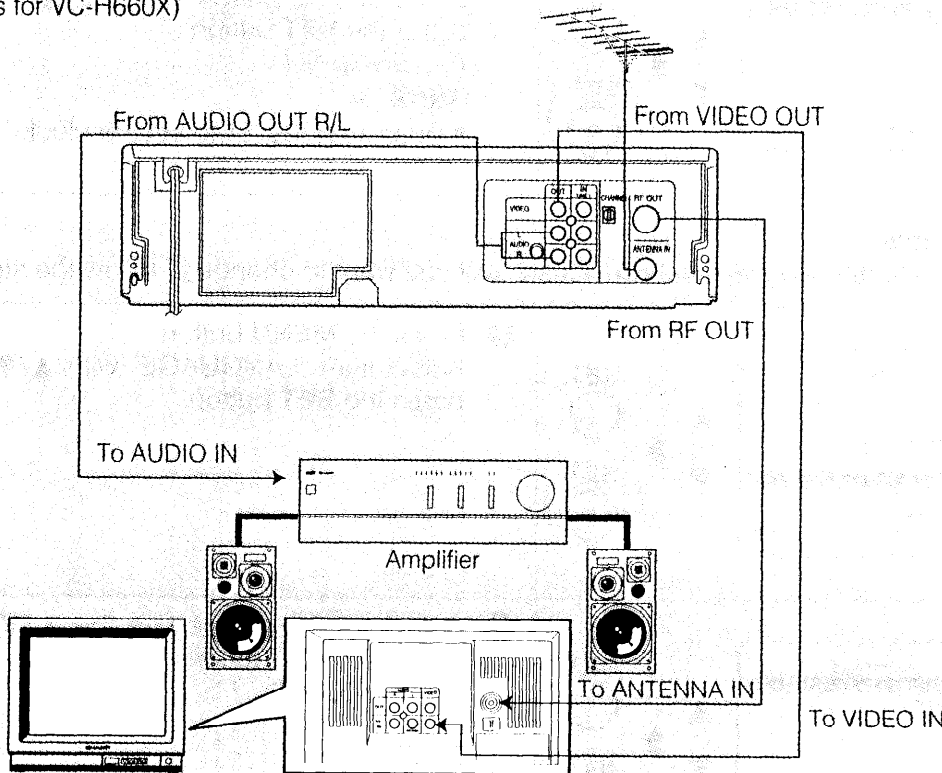
NOTE

- Stereo sound output is only possible using the AUDIO OUT terminals. Sound from the radio frequency converter (RF OUT) is mono only.
- The power cord should not be plugged into the power outlet until the above connections have been completed.
- If TV reception is weak, use a TV signal booster (not supplied).



Connecting to TV And Audio Equipment

(This picture is for VC-H660X)





Setting the Language

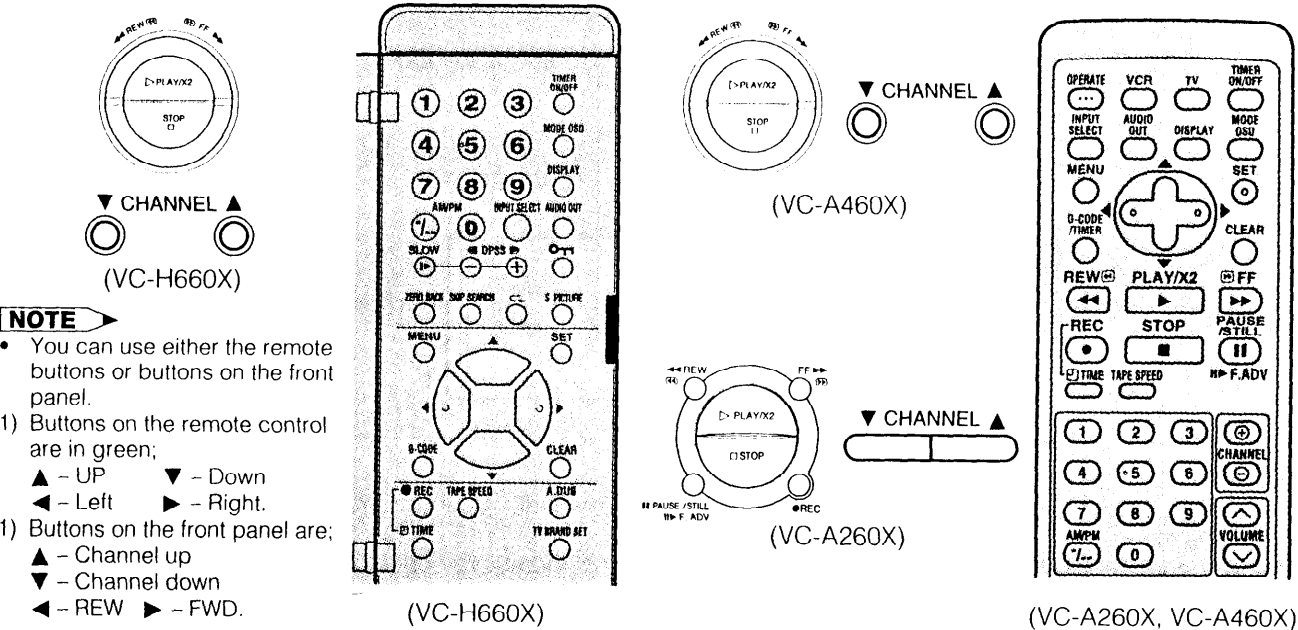
PREPARATION

• Select the video channel on your TV. Press the **OPERATE** button to turn on the VCR.






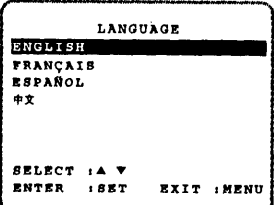

When you use the VCR for the first time or after a power failure of more than 60 seconds the language will be reset. Apply power to the unit to switch it on and press the **MENU** button. Then perform the following procedure.

NOTE

• If the power has been disconnected, it will be necessary to set the language and clock again.



Initial Setting of Language








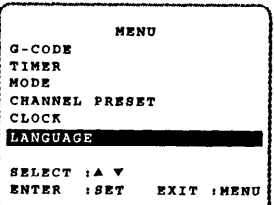

1 Press the **MENU** button. Select the language with the ▲/▼ buttons and press the **SET** button.
Ex.: *ENGLISH*

NOTE






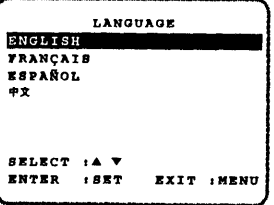

- Refer to page 11 to set the clock.

Changing Language

• If the language has already been set previously and you want to change it, follow the steps below.



1 Press the **MENU** button. Select item "LANGUAGE" with ▲/▼ buttons and press the **SET** button.

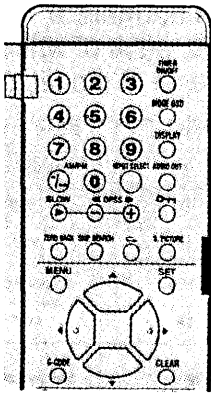


2 Select the language with the ▲/▼ buttons and press the **SET** button.
Ex.: *ENGLISH*

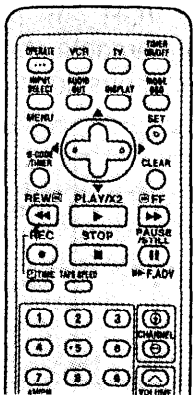


Setting the Clock

When you use the VCR for the first time or after a power failure of more than 60 seconds the clock will be reset. Apply power to the unit to switch it on and press the **MENU** button. Then perform the following procedure.



(VC-H660X)



(VC-A260X, VC-A460X)

Initial Setting of Clock

1 First set the language (Refer to page 10). Then press the SET button.	
<div>▲ or ▼</div> <div><div>CLOCK</div><div>MODE TIME DATE YEAR</div><div>12H 12:00AM 1/01 00</div><div>MODE :24H/12H</div><div>SELECT :4 CHANGE:▲▼</div><div>ENTER :SET EXIT :MENU</div></div> <div>▶▶</div>	2 Select whether the clock should show 12-hour AM/PM time or 24-hour time by pressing the ▲/▼ buttons, and then press the ▶ button. Ex.: 12H NOTE <ul style="list-style-type: none">• "24H" 24-hour display.• "12H" 12-hour AM/PM display.• 12H (AM/PM) mode is preset at the factory.
<div>Numeric buttons or ▲/▼</div> <div><div>CLOCK</div><div>MODE TIME DATE YEAR</div><div>12H 10:28AM 1/01 00</div><div>MODE :24H/12H</div><div>SELECT :4 CHANGE:▲▼</div><div>ENTER :SET EXIT :MENU</div></div> <div>▶▶</div>	3 Set the present time with the numeric or ▲/▼ buttons on the remote control and then press the ▶ button. (First set the 'hour' digits and then the 'minute'. If there is only one 'hour' or one 'minute' digit, enter a 0 first.) Set AM or PM, using the AM/PM button. (12 hour) Ex.: 10:28AM NOTE <ul style="list-style-type: none">• If 12H mode was selected, then set the AM/PM indicator.
<div>Numeric buttons or ▲/▼</div> <div><div>CLOCK</div><div>MODE TIME DATE YEAR</div><div>12H 10:28AM 15/12 00</div><div>DATE :DAY/MONTH</div></div> <div>▶▶</div>	4 Set the date with the numeric or ▲/▼ buttons on the remote control, and then press the ▶ button. (First set the 'day' digits and then the 'month'. If there is only one 'day' or one 'month' digit, enter a 0 first.) Ex.: Dec. 15 (15/12)
<div>Numeric buttons or ▲/▼</div> <div><div>CLOCK</div><div>MODE TIME DATE YEAR</div><div>12H 10:28AM 15/12 97</div></div> <div>▶▶</div>	5 Set the year digits with the numeric or ▲/▼ buttons on the remote control. (If there is only one 'year' digit, enter a 0 first.) Ex.: 97
<div>SET (SET) ▶ MENU</div>	6 Press the SET button. To return to the Normal Screen, press the MENU button.

Changing the Clock Setting

- If the clock has already been set previously and you want to change it, select "clock" from the MENU, and then follow the procedures above.

<div>MENU</div> <div>▶</div> <div><div>MENU</div><div>G-CODE</div><div>TIMER</div><div>MODE</div><div>CHANNEL PRESET</div><div>CLOCK</div><div>LANGUAGE</div><div>SELECT :A ▼</div><div>ENTER :SET EXIT :MENU</div></div> <div>▲ or ▼</div> <div>SET (SET)</div>	1 Press the MENU button. Select item "CLOCK" with the ▲/▼ buttons and press the SET button.
<div>SET (SET) ▶ Normal Screen</div>	2 To return to the Normal Screen, press the SET button.



Setting the Channels

Your VCR can receive VHF channels 0 to 12, and UHF channels 28 to 69. Your VCR has 48 programmable channel positions, each of which can be set to any of the above broadcast channels. The channel positions have been preset at the factory as shown below.

Position	Preset TV Channel	Position	Preset TV Channel
0	—	8	Skipped channel
1	Skipped channel	9	VHF 9
2	VHF 2	10	VHF 10
3	Skipped channel	11-27	Skipped channel
4	Skipped channel	28	UHF 28
5	VHF 5A	29-46	Skipped channels
6	VHF 6		
7	VHF 7	47	—


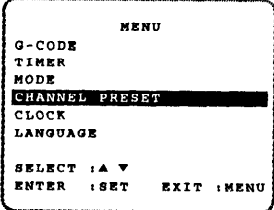
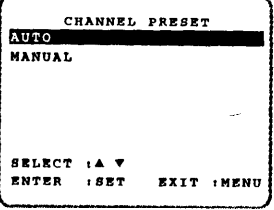
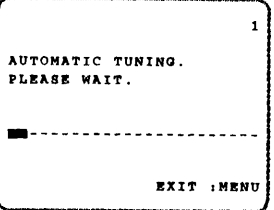
NOTE

- Use the **▲ / ▼ / ◀ / ▶** buttons on the remote control to set the OSD.
- Channel position numbers 1, 3, 4, 8, 11 to 27, and 29 to 46 have been factory set to be skipped when the **CHANNEL** ⊕ or ⊖ button is used.
- If the picture is not clear, if you want a different channel from the one preset or if you wish to reset a skipped channel, reset the channel as follows.

AUTO TUNING

PREPARATION

- Select the video channel on your TV. Press the **OPERATE** button to turn on the VCR.

 	1 Press the MENU button. Select item "CHANNEL PRESET" with the ▲/▼ buttons, and press the SET button.
	2 Select item "AUTO" with the ▲/▼ buttons and press the SET button. NOTE • CHANNEL PRESET has been preset to MANUAL at the factory.
	3 The channel display on the TV screen will continue through all of the channels and when finished, the TV screen will return to the normal screen. The bar display indicates the estimated amount of channels tuned.

NOTE

- If additional unwanted channels were found, refer to page 14 to skip unwanted channels.
- If some channels were unable to be found, please refer to page 13 for Manual Tuning.


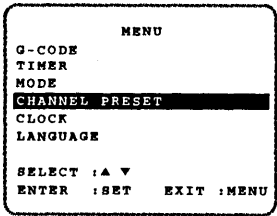


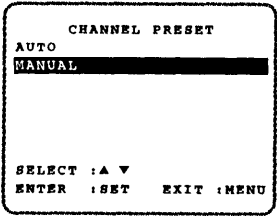


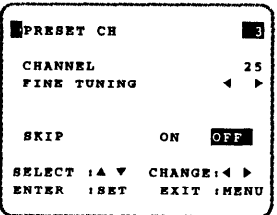
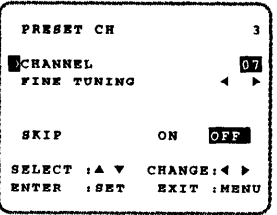
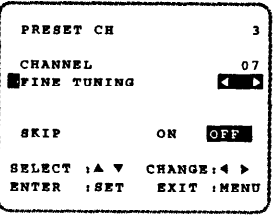





MANUAL TUNING

PREPARATION

- Select the video channel on your TV. Press the **OPERATE** button to turn on the VCR.

Example: Tuning Channel Position 3 to Broadcast TV Channel 7

 MENU  or  or 	<p>① Press the MENU button. Select item "CHANNEL PRESET" with the ▲ / ▼ buttons and press the SET button.</p>
 or  or 	<p>② Select item "MANUAL" with the ▲ or ▼ buttons and press the SET button.</p> <p>NOTE ➤</p> <ul style="list-style-type: none">• CHANNEL PRESET has been preset to MANUAL at the factory.
<p>Numeric buttons or ◀ / ▶</p>  or ▼	<p>③ Select the preset channel position number with the numeric or ◀ / ▶ buttons, and then press the ▼ button.</p>
<p>Numeric buttons or ◀ / ▶</p>  or ▼	<p>④ Press the numeric buttons or the ◀ / ▶ buttons until you see the desired broadcast channel on your TV, and then press the ▼ button.</p>
 or ◀ or ▶	<p>⑤ For fine tuning, press the ◀ or ▶ button until the broadcast channel comes in clearly on your TV.</p>
 or  Next Screen	<p>⑥ Press the SET button. If you wish to preset more channels, repeat steps ③ through ⑤.</p>
 Normal Screen	<p>⑦ To return to the Normal Screen, press the MENU button.</p>

NOTE ➤

- Numeric buttons on the remote control can also be used to select channel numbers. Press the **7..** button to switch between one and two digit number for step ③.



Channel Skip/Cancelling Skip


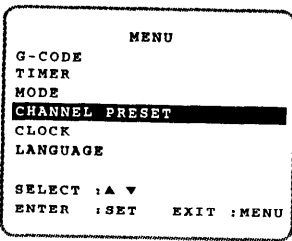
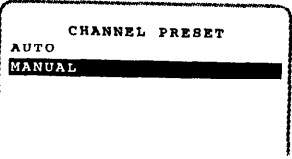
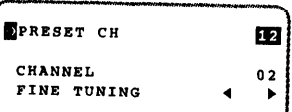

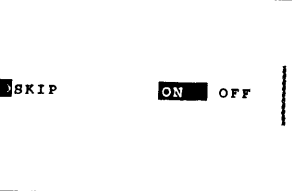

Channel skip

If there are channel positions that are not preset, you can skip them with the following procedure.

PREPARATION

- Turn on your TV and VCR, and select the video channel on your TV.

Example: Skip channel position 12.

 → 	① Press the MENU button. The MENU screen will appear. Select item "CHANNEL PRESET" with the ▲ / ▼ buttons and press the SET button.
▲ / ▼ → 	② Select item "MANUAL" with ▲ / ▼ buttons and press the SET button.
◀ / ▶ or (Numeric buttons) → 	③ Set the channel position you wish to skip with the ◀ / ▶ (or numeric) buttons. Ex.: 12
▲ / ▼ → 	④ Select SKIP setting mode with the ▲ or ▼ button.
◀ / ▶ or 	⑤ Press the ◀ or ▶ button to select SKIP ON and press the SET button.
	⑥ If you wish to set more channels to be skipped, repeat steps ③ through ⑤.
 → Normal Screen	⑦ To return to the Normal Screen, press the MENU button.

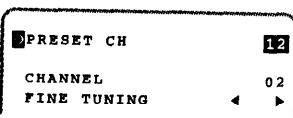



Cancelling skip

PREPARATION

- Turn on your TV and VCR, and select the video channel on your TV.

Example: Reset channel position 12.

- Follow the same procedure ①, ② in **Channel skip**, and then the procedure ③–⑦ below.

◀ / ▶ or (Numeric buttons) → 	③ Select the channel position you wish to unskip with the ◀ / ▶ (or numeric) buttons. Ex: 12
▲ / ▼ → 	④ Select SKIP setting mode by pressing the ▲ or ▼ button.
◀ / ▶ or 	⑤ Press the ◀ or ▶ button to select SKIP OFF and press the SET button.
	⑥ If you wish to unskip more channels, repeat steps ③ through ⑤.
 → Normal Screen	⑦ To return to the Normal Screen, press the MENU button.



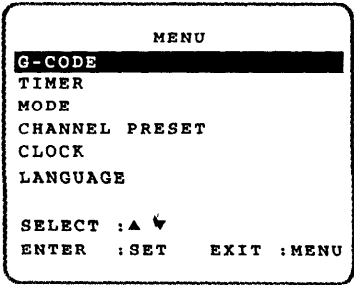
Menu Screen

- 1 Turn on your TV and select the video channel.
- 2 Press the **OPERATE** button to turn on the VCR, and then press the **MENU** button to display the MENU screen.
- 3 Select the item you want by pressing the **▲** or **▼** button on the remote control. Refer to the pages listed below for details on each item.

The following 6 items can be set by using the On Screen Display (OSD).

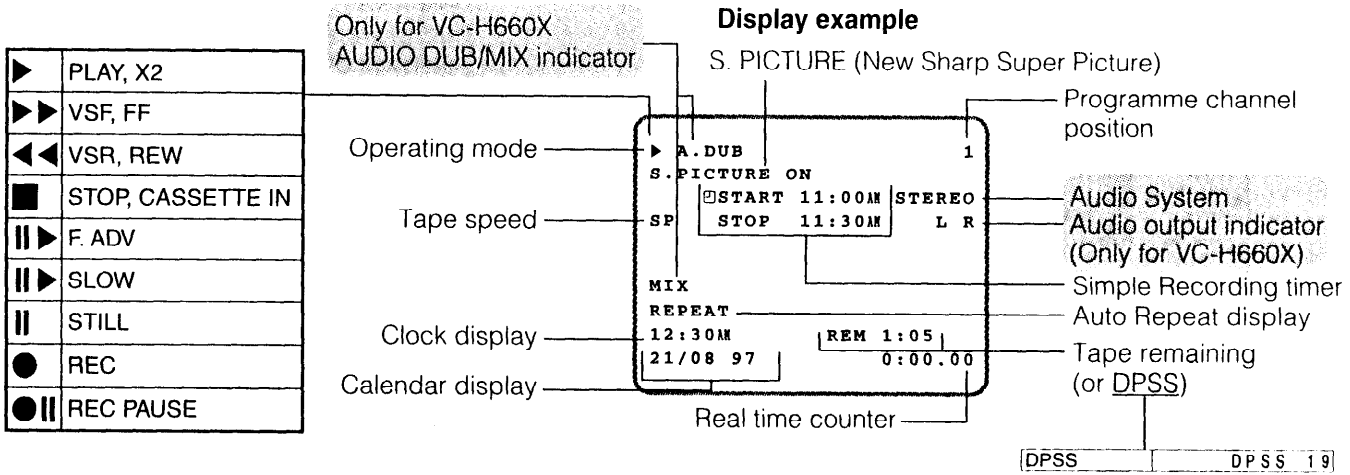
- 1: G-CODE Setting a G-CODE timer recording. (See page 25.)
- 2: TIMER..... Setting a timer recording (and checking it). (See page 27 for the setting procedure.)
- 3: MODE..... VCR operating conditions are set according to the broadcast reception and tape playback conditions. (See page 16.)
- 4: CHANNEL PRESET Setting the channels. (See page 12.)
- 5: CLOCK Setting the present time. (See page 11.)
- 6: LANGUAGE Selection of language to be used for the On Screen Display. (See page 10.)

- 4 Press the **SET** button. The screen changes to the item which you have selected.
- 5 To cancel the MENU screen, press the **MENU** button.



OSD (On Screen Display)

The tape counter and VCR mode can be shown on the screen while you are playing back a tape or watching a broadcast on the video channel.

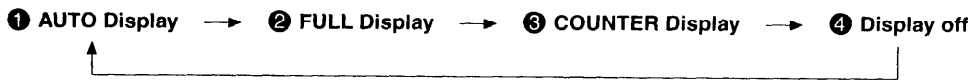


NOTE

- If the clock is not set, the time and date will not be displayed.

How to Display Indicators

- 1 Turn on your TV and select the video channel.
- 2 Press the **OPERATE** button to turn on the VCR. Mode indicators are displayed in the AUTO display screen.
- 3 Each time the **MODE OSD** button is pressed, the screen changes as follows:



AUTO Display

When an operation button, numeric button, or **CHANNEL** **⊕/⊖** button is pressed, the current mode or the number of the channel will be displayed in the upper section of the TV screen for about 3 seconds.

NOTE

- When you record a video signal output from this VCR on another VCR, press the **MODE OSD** button to select Display Off. (If the mode indicator is displayed on the screen, it is also recorded on the tape.)




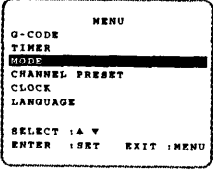


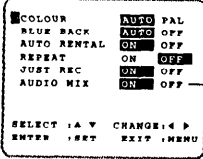


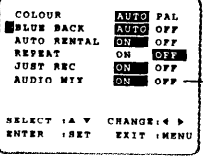


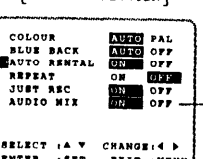


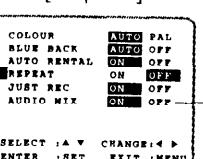


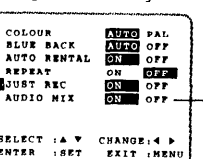


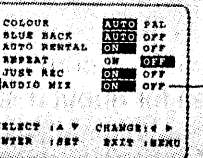






Mode Selection

You can set the basic functions listed in the table below on the MODE selection screen.

PREPARATION

- Turn on your TV and select the video channel. Press the **OPERATE** button to turn on the VCR.

 →  or  →  →  ()	<p>① Press the MENU button.</p> <p>② Select the MODE selection mode with the ▲ / ▼ buttons, and then press the SET button.</p>
<p>[Colour]</p>  Only for VC-H660X →  or 	<p>③ Select the COLOUR mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. (For details, see Colour Mode on page 19.) AUTO Usually select AUTO mode. PAL Strict PAL colour mode.</p>
<p>[Blue Back]</p>  Only for VC-H660X →  or 	<p>④ Select the BLUE BACK mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. AUTO Usually select AUTO. A blue screen will appear when your VCR receives no TV signal or an unrecorded tape is played back. OFF Select OFF if the screen turns blue due to weak TV signal reception, or playback of a poorly recorded tape.</p>
<p>[Auto Rental]</p>  Only for VC-H660X →  or 	<p>⑤ Select the AUTO RENTAL mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. (For details, see Auto Rental Mode on page 20.)</p>
<p>[Repeat]</p>  Only for VC-H660X →  or 	<p>⑥ Select the REPEAT mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. (For details, see Auto Repeat on page 33.)</p>
<p>[Just REC]</p>  Only for VC-H660X →  or 	<p>⑦ Select the JUST REC mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. (For details, see Intelligent Timer Recording (JUST REC) on page 30.)</p>
<p>[Audio Mix]</p>  Only for VC-H660X →  or 	<p>Only for VC-H660X</p> <p>⑧ Select the AUDIO MIX mode by pressing the ◀ / ▶ buttons, and then press the ▼ button. (For details, see page 30-31.)</p>
 () → Normal Screen	<p>⑨ Press the SET button to return to the normal screen.</p>

Playback

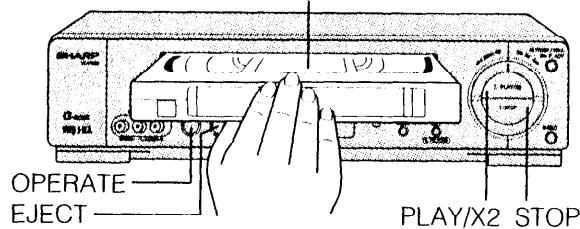
Inserting a Video Cassette

Gently insert the video cassette into the cassette compartment. The VCR turns on automatically. If the cassette is inserted incorrectly, the loading system will not function. Do not force the cassette into the VCR. When the cassette has been properly loaded, "000" appears on the VCR display. To remove the cassette, press the **EJECT** button during stop mode.

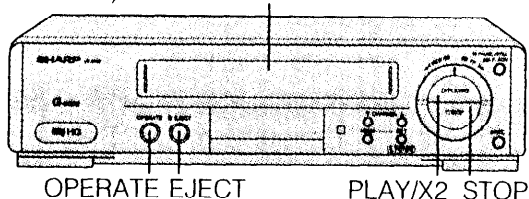
Playback PREPARATION

- Turn on your TV and select the video channel.

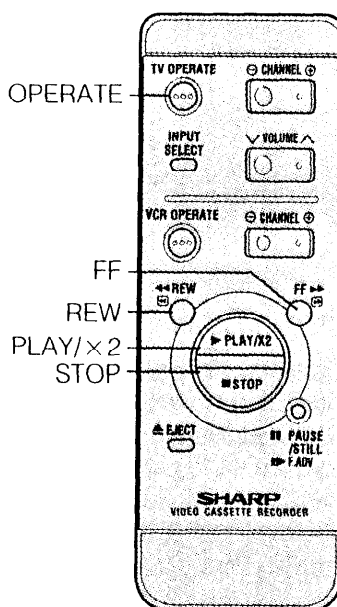
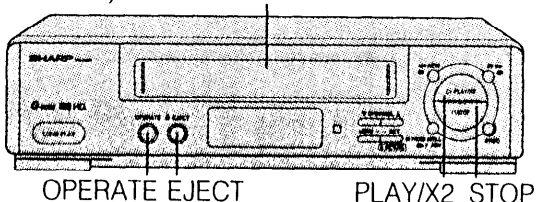
(VC-H660X) Insert a cassette.



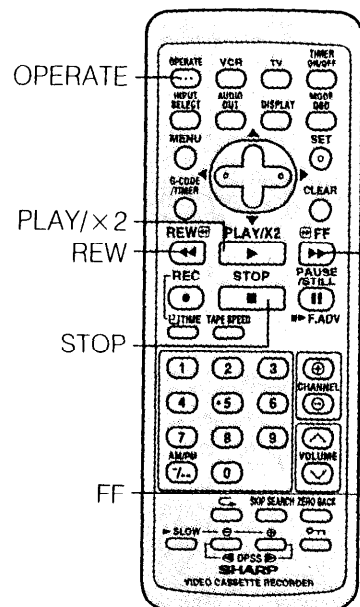
(VC-A460X) Insert a cassette.



(VC-A260X) Insert a cassette.



(VC-H660X)



(VC-A260X, VC-A460X)

- 1 Press the **OPERATE** button to turn on the VCR.
- 2 Insert a cassette.
- 3 Press the **PLAY/X2** button. (The auto tracking control system engages and "►" flashes on the TV screen for a few seconds.)
- 4 To stop playback, press the **STOP** button. (If the tape reaches its end, the VCR will automatically rewind the tape to the beginning, eject the cassette, and turn off the power.)

Video Search

(VC-A260X: Operable from VCR or remote control; VC-A460X/VC-H660X: *Operable only from remote control)

Use the following procedure to quickly find the section you want, while viewing the picture.

- 1 During playback, press the **FF** button for forward video search, or the **REW** button for reverse search.

	VSF/VSF (1)	VSF/VSF (2)
SP/LP	×7	×3

There are 2 search speeds in each direction. The VCR switches between them each time the button is pressed.

- 2 Press the **PLAY/X2** button to resume normal playback.

NOTE

- During video search of a tape recorded in the LP mode, the upper part of the picture may be skewed to one side.
- * For VC-A460X/VC-H660X VCR control, refer to the page 18 for Shuttle system.

Fast Forwarding and Rewinding

(VC-A260X: Operable from VCR or remote control; VC-A460X/VC-H660X: *Operable only from remote control)

- 1 To move through the cassette faster, press the **STOP** button and then press the **FF** or **REW** button to fast forward or rewind the cassette. (The picture cannot be viewed in this mode.)
- 2 Press the **STOP** button to stop fast forward or rewind.

NOTE

- If you use other than E-90/E-180 cassettes, fast forward and rewind may take somewhat longer.



(Only for VC-A460X, VC-H660X)

Shuttle System

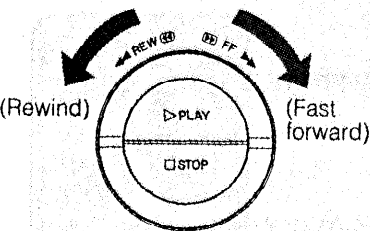
The shuttle system lets you control all the basic playback functions using just the shuttle ring part.

NOTE

- The shuttle ring does not rotate 360°.

DURING STOP MODE

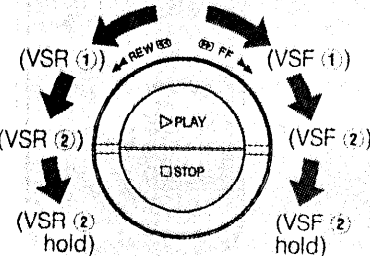
Fast Forward and Rewind



- 1 Turn the ring either to the right or the left and release it. (The shuttle ring will return to centre.)
- 2 Press the **STOP** button to stop fast forward or rewind.

DURING PLAY MODE

Video Search

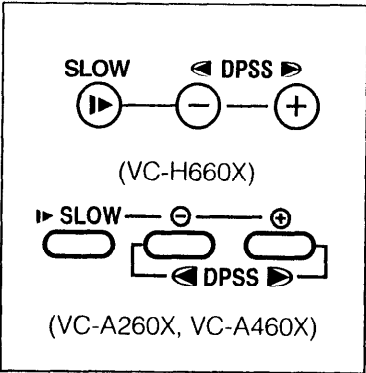


- Turn the ring to the left or the right during playback to enter VSF (Video Search Forward), or VSR (Video Search Reverse) mode. Select from two speeds by turning the ring. Release the ring (the shuttle ring returns to centre) to return to playback.
- During playback, turning the ring all the way to the left or right locks the VCR in VSF (Video Search Forward), or VSR (Video Search Reverse) mode. Press the **PLAY/X2** button to return to regular playback.

TAPE SPEED

	VSF/VSR (1)	VSF/VSR (2)
SP/LP	× 7	× 3

Slow Motion Playback (with the Remote Control)



- 1 Press the **SLOW** button on the remote control during playback.
- 2 Press the **SLOW** ⊕ or ⊖ button (to the right of the SLOW button) to vary the slow motion playback speed between 1/5 and 1/30 of the normal playback speed.
- 3 Press the **PLAY/X2** button to resume normal playback.



Still Picture and Frame Advance

- 1 Press the **PAUSE/STILL (F.ADV)** button during playback. This will freeze the picture on your TV.
- 2 If noise bars appear on the screen during still picture, set your VCR to the slow mode and press the **CHANNEL** \oplus/\ominus buttons to make the noise disappear. Then press the **PAUSE/STILL (F.ADV)** button again.

Only for VC-A260X

- Some picture noise will remain with this model.

- 3 If there is vertical jitter during Still Picture Playback, press the **CHANNEL** \oplus/\ominus buttons to stop the jitter.
- 4 Press the **PAUSE/STILL (F.ADV)** button during still mode for frame advance.
- 5 Press the **PLAY/X2** button again to resume normal playback.

Double Speed Playback

- 1 Press the **PLAY/X2** button during playback. The tape will be played back at twice the normal speed.
- 2 Press the **PLAY/X2** button to resume normal playback.

NOTE

- Sound is muted during video search, slow motion, still picture, frame advance, and double speed playback.
- To avoid damage to the tape, your VCR will resume normal playback after about 5 minutes of slow motion playback and still picture.
- During slow motion, still, frame advance and double speed playback with a tape recorded in the LP mode, the upper part of the picture may be skewed to one side.

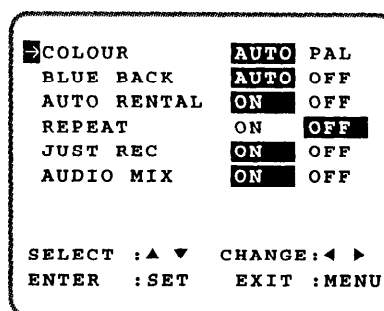
Colour Mode

If a colour recording's quality is poor, the picture may turn black and white. In this event, set the COLOUR mode on the MODE selection screen to PAL (strict PAL colour mode). Normally, the colour mode should be set to "AUTO" mode.

(See **Mode Selection** on page 16.)

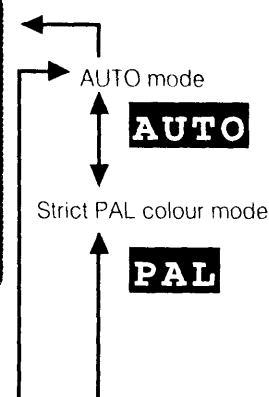
NOTE

- When the colour mode is set to fixed colour mode while the VCR is playing back a black and white tape or is receiving a black and white broadcast, the picture may be coloured. In this event, set the COLOUR mode on the MODE selection screen to "AUTO" mode.



(Select with ◀ or ▶ button.)

Then press **SET** button.



(Only for VC-A460X, VC-H660X)

NTSC Tape Play Back on PAL TV

When you play back an NTSC tape on your VCR, it is possible to use a PAL or multi-system compatible TV. However, please note the following:

- The picture will shrink vertically to some degree, as shown in the diagram, but this does not indicate a malfunction in your TV or VCR.
- If your TV does not have a V-HOLD control, the picture may roll and be unwatchable. However, if you use a TV with a V-HOLD control, you can stop the rolling by adjusting the V-HOLD control and watch the picture.
- Horizontal noise bars may appear on the screen during special effect playback (video search, still, slow, frame advance, and double speed playback), possibly accompanied by discolouring.
- Although NTSC tapes can be played back onto a PAL TV, those tapes cannot be dubbed by a PAL system VCR connected to the AUDIO OUT and VIDEO OUT terminals of this product. Tapes recorded in this way cannot be played back on PAL system VCRs.
- Set the COLOUR mode to AUTO. If the COLOUR mode is set to PAL, you cannot play back the tape.



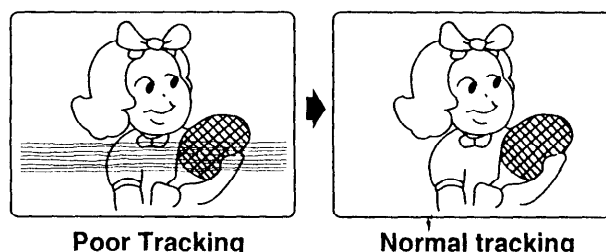


Auto Tracking Control System

This function automatically adjusts the tracking to match the recorded tape. Auto tracking engages in the following cases:

- When you insert the cassette and begin playback.
- When you press the **CHANNEL** ⊕ and ⊖ buttons at the same time.
- When the VCR has been playing back an un-recorded section of tape, and then reaches a recorded tape segment.

When auto tracking engages, “▶” on the TV screen flashes for a few seconds.



NOTE

- When a poorly recorded tape is played back, auto tracking may not operate normally. In this event, manually adjust the tracking with the **CHANNEL** ⊕/⊖ buttons to make any noise disappear.

Auto Head Cleaning System

When the tape is inserted or ejected, this system automatically cleans the drum and heads with a special roller before recording or playback begins, protecting the heads and drum from dirt and preserving beautiful picture quality.

Quick Start with Full Loading Mechanism

Your VCR has a standby function (Full Loading Mechanism) to allow immediate recording and playback.

After pressing the **REC** or **PLAY/X2** button, it takes about 2 seconds until recording or playback is engaged when in the standby mode.

Auto Rental Mode

(This function only works when AUTO RENTAL mode on the MODE selection screen is set to ON.)

The convenient auto rental mode lets you enjoy playback with ease. When you insert a cassette with the erasure protection tab removed (rental videos, etc.), your VCR automatically turns on the power, winds the tape forward to find the recorded section, and plays back the tape. When the tape reaches the end of recorded section, the VCR automatically rewinds the tape, ejects it and turns off the power.

NOTE

- If there is more than a 15 second unrecorded section between recorded sections, the tape will automatically stop and rewind. To watch the next recorded section, press the **STOP** button, fast forward to that section and play the tape.
- If the erasure protection hole is covered, press the **PLAY/X2** button after the power turns on automatically. (Auto Rental Mode does not work.)
- If Auto Rental and Repeat (Auto Repeat) modes on the MODE selection are set to ON simultaneously, Auto Rental will not function. (If this happens, set Repeat (Auto Repeat) mode to OFF.)
- The AUTO REPEAT mode has priority over the AUTO RENTAL mode. If the AUTO REPEAT mode is set to ON and the video cassette reaches its end, the VCR will rewind the tape and play it back again without ejecting the tape or turning off the power.



Blue Back

Set the BLUE BACK mode to AUTO on the MODE-selection screen. (See **Mode Selection** on page 16.) This function eliminates monitor noise and mutes sound during playback of unrecorded portions of a tape, and when receiving a non-broadcasting channel. A blue screen will also appear if the VCR is set to the Auxiliary input (LINE IN) mode but no video signal is fed to the VCR. (The BLUE BACK mode is set to AUTO at the factory.)

NOTE

- Blue Back does not function during still picture, variable slow motion and video search.
- Blue Back may not function properly if the broadcast signal is too strong or too weak.
- Blue Back cannot be recorded.
- If the antenna signal is weak while recording a TV programme, or if the input signal is weak while tape dubbing, the monitor screen may turn blue back since the unit may not recognize whether or not a proper signal is being received. In this event, set the BLUE BACK mode to OFF.

Full Auto Playback

(This function only works when AUTO RENTAL mode on the MODE selection screen is set to OFF.) Full Auto Playback lets you enjoy playback with ease. When you insert a cassette with the erasure protection tab removed, your VCR automatically turns on the power and plays back the tape. When the tape reaches its end, the VCR automatically rewinds the tape, ejects it and turns off the power.

NOTE

- If the erasure protection hole is covered, press the **PLAY/×2** button after the power turns on automatically.

(Only for VC-H660X)

Playback of Hi-Fi Recorded Tapes

This VCR will play back both video and audio-only tapes recorded in the Hi-Fi mode.

NOTE

- Stereo sound output is only possible using the AUDIO OUT terminals. Sound from the radio frequency converter (RF OUT) is mono only. A blue screen will appear if audio-only Hi-Fi tapes are played back.

Audio Output Mode

The audio output mode is controlled by the **AUDIO OUT** button on the remote control. The VCR is normally set to the Hi-Fi mode, with **L** and **R** displayed on the VCR display, and normal stereo sound output.

Select **L**, and only the Hi-Fi Left channel audio is heard from both the Right and Left speakers.

Select **R**, and only the Hi-Fi Right channel audio is heard from both the Right and Left speakers.

If you select the mono linear track, **L** and **R** will disappear.

NOTE

- Should the Hi-Fi output level be poor, the VCR will automatically select the mono linear track output.
- When playing back tapes which have only Hi-Fi sound recorded: if Hi-Fi sound is not reproduced, or if there is some noise in the audio, press the **CHANNEL ⊕** or **⊖** button until the sound improves.

Adjusting Hi-Fi Audio Tracking

(To adjust the Hi-Fi tracking manually when playing back a poorly recorded Hi-Fi tape)

- Normally you can simultaneously press and hold both **CHANNEL ⊕ / ⊖** buttons to obtain the optimal Hi-Fi audio tracking.

- If Hi-Fi audio is unstable (frequent dropouts, etc.) with a rental video, a tape recorded on another VCR, restore normal tracking while playing back the tape as described below:

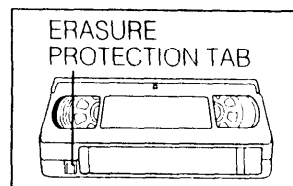
- ① Simultaneously press the **CHANNEL ⊕ / ⊖** buttons.
- ② Press the **CHANNEL ⊖** button repeatedly at equal, short intervals until the **L** and **R** indicators disappear from the VCR display.
- ③ Press the **CHANNEL ⊕** button in the same manner while counting button operations until the **L** and **R** indicators reappear and then disappear again.
- ④ Press the **CHANNEL ⊖** button again for half the number of times counted in step ③ above to obtain optimal tracking.



Recording a TV Programme

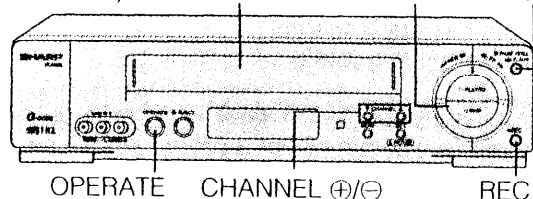
Cassette Erase Protection

A **VHS** cassette has a removable tab to prevent accidental erasure of recorded material. Removing the tab prevents recording. To record on a video cassette with the tab removed, place adhesive tape over the tab opening.

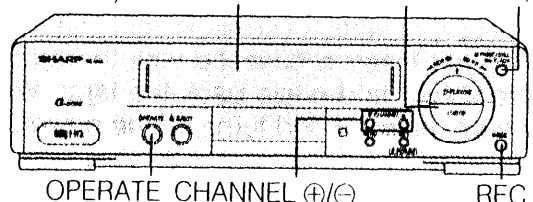


Recording a TV Programme

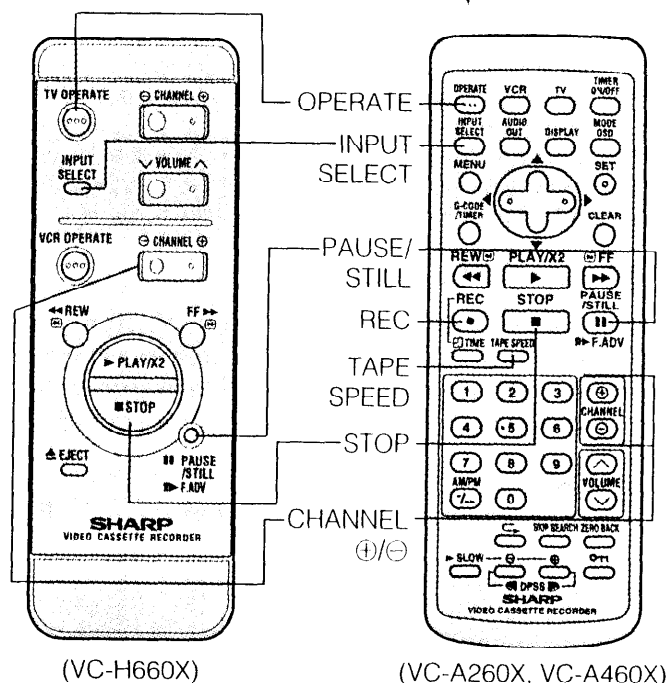
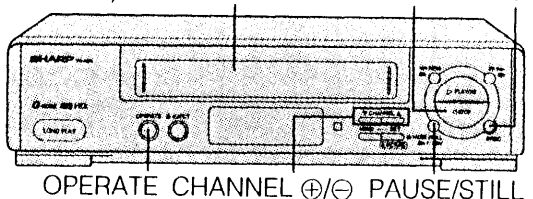
(VC-H660X) Insert a cassette. STOP PAUSE/STILL



(VC-A460X) Insert a cassette. STOP PAUSE/STILL



(VC-A260X) Insert a cassette. STOP REC



(VC-H660X)

(VC-A260X, VC-A460X)

PREPARATION

- Turn on your TV and select the video channel.

PROCEDURE

- 1 Press the **OPERATE** button to turn on the VCR.
- 2 Insert the cassette, making sure the erasure protection hole is covered.
- 3 Select the channel position you wish to record with the **CHANNEL +/-** buttons.
- 4 Select the SP (Standard Play) or LP (Long Play) recording speed with the **TAPE SPEED** button on the remote control ("SP" or "LP"

will light up on the VCR display). SP (Standard Play) gives the best picture quality. LP (Long Play) gives the longest recording time.

- 5 Press the **REC** button. (If the erasure protection hole is uncovered, the cassette will be ejected.) To pause during recording, press the **PAUSE/STILL (F. ADV)** button. To resume recording, press the **PAUSE/STILL (F. ADV)** button again.

- 6 To stop recording, press the **STOP** button.

NOTE

- The pause mode disengages automatically after about 5 minutes, and the VCR enters stop mode.
- To record audio and video from an external source through the AUDIO/VIDEO terminal on the front or rear of the VCR, press the **INPUT SELECT** button on the remote control or press the **CHANNEL +/-** buttons to select the L1 or L2 channel position situated between the last channel and first channel. (When the L1 or L2 position is selected, "L1 or L2" is displayed where a channel position number is usually displayed.)

NOTE

- VC-A260X, VC-A460X are only equipped with AUDIO/VIDEO (rear) terminals. ("AV" is displayed)
- If the TV signals are weak and the picture changes to monochrome, set the "PAL" mode on the MODE selection screen. (See **Colour Mode** on page 19.) Normally, the colour mode should be set to "AUTO".

To Watch Another TV Programme While Recording

After steps 1 to 5 have been completed, select the programme you wish to view using the TV tuner. At the end of the tape, your VCR will automatically stop recording, rewind to the beginning of the tape, eject the tape and turn off the power.



Recording Hi-Fi Stereo Sound

(Only for VC-H660X)

This VCR automatically records audio signals on two kinds of audio tracks.

Hi-Fi: Using specialized rotary heads, audio signals are recorded on the video track in the FM format. Multi-sound broadcasts (stereo or bilingual programmes) are automatically recorded on two channels.

Normal: Audio signals are recorded monaurally on the linear track. Stereo broadcasts are recorded in mono, and only the main audio track of bilingual programmes is recorded.

NOTE

- Video cassettes recorded on a non-Hi-Fi VCR can also be played back. However, if the audio signals are recorded on two linear channels, stereo programmes will be played back monaurally and bilingual programmes will be played back with both the main and sub audio tracks mixed together.
- Video cassettes recorded on this VCR can be played back on a non-Hi-Fi VCR. However, only the normal (linear) track will be played back.

Switching Input Signals (Only for VC-H660X)

Various sources of video and audio signals can be recorded as shown in the following chart.

- (a) Selecting a channel will record both video and audio from the VCR tuner.
- (b) Selecting an external source position (to select an external source position, press the **INPUT SELECT** button or select a channel situated between the last channel and the first channel with the **CHANNEL** ⊕ / ⊖ buttons) will record both video and audio from an external source via the back-panel AUDIO/VIDEO LINE 1 or front LINE IN 2 terminal.

Input mode	TV screen	Signals Recorded		
		Video track	Normal audio track	Hi-Fi audio track
Tuner	2	Signals from tuner		
External 1 (LINE 1)	L1	Signals from AUDIO/VIDEO (LINE1) socket on the rear of the VCR		
External 2 (LINE 2)	L2	Signals from LINE IN 2 terminal on the front of the VCR		

Recording Audio Only

This VCR can record Hi-Fi audio-only signals.

- 1 Connect the audio source (CD player, etc.) to the AUDIO-IN L/R terminals on the front or rear of the VCR.
- 2 Select the connected external position LINE IN 1 or 2 ("L1" or "L2" lights up) by pressing the **INPUT SELECT** button or the ⊕ / ⊖ buttons.
- 3 Press the **TAPE SPEED** button on the remote control to select SP or LP mode.
- 4 Press the **REC** button.



Simple Recording Timer

There are two ways to use this Simple Recording Timer for your convenience.

- Immediate recording:
Convenient when having an unexpected visitor or telephone call.
- Delayed recording:
Convenient when leaving the house or going to bed.

Immediate Recording

		1 Select the channel position to be recorded by pressing the CHANNEL +/- buttons. (Ex.: Channel position: 2) In each step, STEREO and L R appear on the screen for VC-H660X.
		2 Press the REC button to enter the normal recording mode. Then, press the REC button repeatedly to set the desired ending time. (Ex.: Ending time: 9:30 AM) NOTE <ul style="list-style-type: none">• Each press of the REC button increases the stop time by 10 minutes.• If necessary, press the CHANNEL +/- buttons to change the minutes setting.

NOTE

- Press the **STOP** button to terminate recording.

Delayed Recording

		1 Select the channel position to be recorded by pressing the CHANNEL +/- buttons. (Ex.: Channel position: 2)
		2 Set the starting time by pressing the TIME button. (Ex.: Starting time: 8:40 AM) NOTE <ul style="list-style-type: none">• Each press of the TIME button increases the start time by 10 minutes.• Setting the time within a 24-hour period in 10-minute intervals is possible.• Press the CHANNEL +/- buttons to adjust the minutes if necessary.
		3 Set the ending time by pressing the REC button. (Ex.: Ending time: 9:30 AM) NOTE <ul style="list-style-type: none">• Each press of the REC button increases the stop time by 10 minutes.• If necessary, press the CHANNEL +/- buttons to change the minutes setting.
		4 Press the OPERATE button to turn off the power. (Ex.: Present time: 8:28 AM)

NOTE

- After the Simple Recording Timer is set, the channel position cannot be changed.
- To confirm the starting time and the ending time, first press the **OPERATE** button to turn on the power. Then press the **TIME** button to confirm the starting and ending time. Press the **OPERATE** button to turn off the power.
- To clear the Simple Recording Timer setting during setting of "Delayed Recording", press the **CLEAR** button on the remote control. To clear after setting, turn on the power, press the **TIME** button to select Simple Recording Timer mode, and then while the **START** time is flashing, press the **CLEAR** button.
- The Simple Recording Timer cannot be set if the timer has been preset ("P" indicator on the VCR display is lit). If this is the case, cancel the timer standby mode by pressing the **TIMER ON/OFF** button, turn on the power and then proceed with setting of the Simple Recording Timer.
- Select the SP (Standard Play) or LP (Long Play) recording speed with the **TAPE SPEED** button on the remote control ("SP" or "LP" will light up on the VCR display). SP (Standard Play) gives the best picture quality. LP (Long Play) gives the largest recording time.
- The stop time for delayed recording must be set within 10 seconds of setting the start time otherwise start time must be set again.



Programming the Timer with G-CODE®

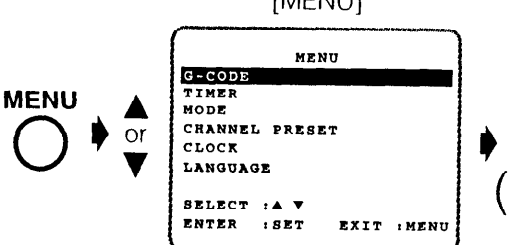
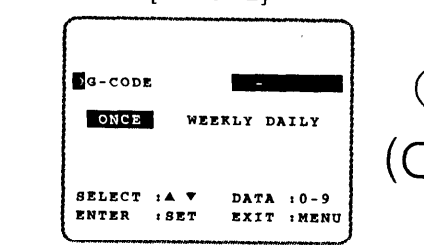
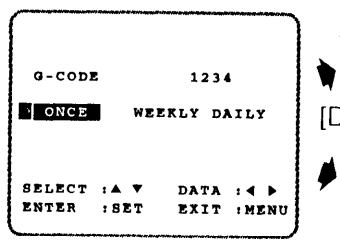
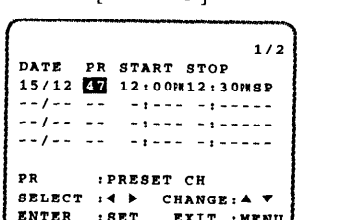
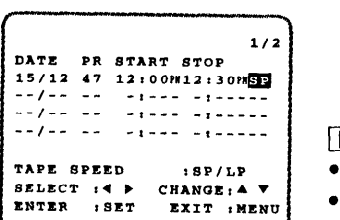
This VCR has the G-CODE Programming System. By simply inputting the G-CODE number with the 1–9 numeric buttons, you can programme your VCR for timer recording.

The G-CODE numbers are listed in most newspaper, TV guide, and local cable TV listings.

The timer can be set for automatic recording of up to 8 events over a 365 day period. In addition, each of the events can be set to be recorded on a daily or weekly basis up to the limit of the tape.

PREPARATION:

- Load the cassette, ensuring the erasure protection hole is covered. The VCR power will automatically turn on.
- Check that the clock is displaying the correct time.

<p>[MENU]</p>  <p>MENU button, or, SET button</p>	<p>1 Press the MENU button.</p> <p>2 Select G-CODE setting mode with the ▲ or ▼ button and then press the SET button.</p>
<p>[G-CODE]</p>  <p>0-9 numeric buttons, (0-9) button</p>	<p>3 Set the G-CODE number with the numeric (0 to 9) buttons.</p> <p>NOTE</p> <ul style="list-style-type: none">• For the G-CODE number, refer to your newspaper or TV guide.• Press the G-CODE button (for VC-H660X) or the G-CODE/TIMER button (for VC-A260X/A460X) on the remote control to directly select this screen.
<p>[ONCE/DAILY/WEEKLY]</p>  <p>SET button, (SET) button, [Once], [Daily/Weekly], SET button, (SET) button</p>	<p>4 If you want to record only once, press the SET button and go to step 5. Otherwise, press the ▲ or ▼ button to select daily/weekly setting mode, and then select "D (DAILY)" or "W (WEEKLY)" by pressing the ◀ / ▶ buttons. And then press the SET button.</p> <p>NOTE</p> <p>"ONCE": To record only once. "D (DAILY)": To record every day at the same time. "W (WEEKLY)": To record every week at the same time.</p>
<p>[Channel]</p>  <p>Numeric buttons, or, ▲ / ▼ buttons</p>	<p>5 If you are going to record a programme from a station which does not have the PR number programmed, ("--" is displayed) set that number to be the same as the PR number to which your broadcasting channel is set into. (See Note on the next page.) Use the numeric or ▲ / ▼ buttons. Then press the ▶ button.</p> <p>Ex.: 47</p>
<p>[Tape Speed]</p>  <p>NOTE</p> <ul style="list-style-type: none">• SP: Standard Play• LP: Long Play	<p>6 Select the tape speed with the ▲ or ▼ button. (See Intelligent Timer Recording (JUST REC) on page 30.)</p>

Continued on next page



	<p>7 Press the SET button.</p> <p>NOTE To programme additional timer settings, press the SET button and repeat steps 3 through 7.</p>
	<p>8 To return to the Normal Screen, press the MENU button.</p>
	<p>9 To set the VCR for automatic timer recording, press the TIMER ON/OFF button and ensure the "⏏" indication lights on the VCR display.</p>

NOTE

- Please be sure to check that the start and end times of two different programmes do not overlap, as the remote control has been designed to accept the basic individual G-CODE number only. If the recording periods of two programmes overlap, the beginning of the second programme will not be recorded.
- To cancel the programmed G-CODE setting, select the TIMER setting mode on the MENU screen. Then select the programme number you wish to cancel with the ▲/▼ buttons and press the **CLEAR** button. (See **Cancelling Timer Programmes** on page 29.)

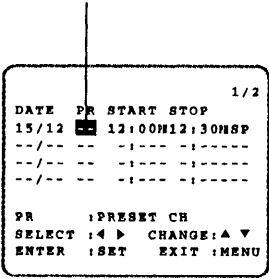
Setting the Programme Number In Step 5

When using G-CODE for the first time the Programme number (PR) on the screen shows two dashes and is highlighted white. Set it to be the same as the PR number to which your broadcasting channel is set into.

For instance if you can view CH 47 on programme (PR) 47, set the On screen PR number to 47.

- You need to set this only once.
- If the channels are retuned you need to set the PR numbers again.

Input programme No. here.





Recording with the Timer

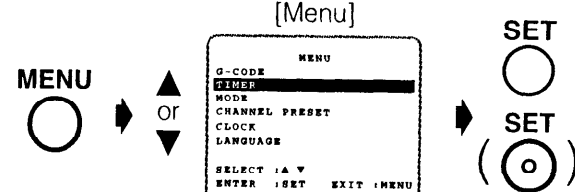
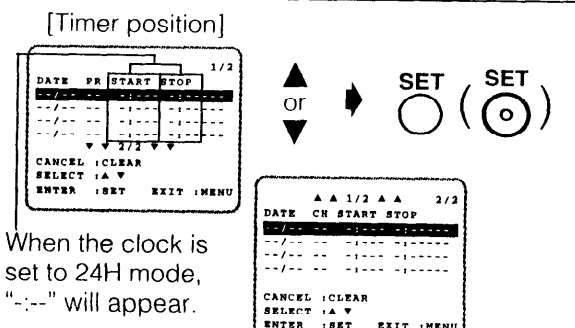
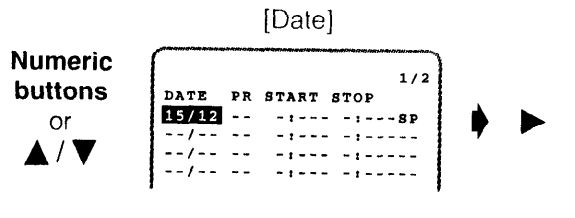
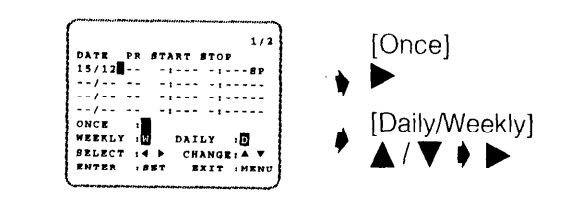
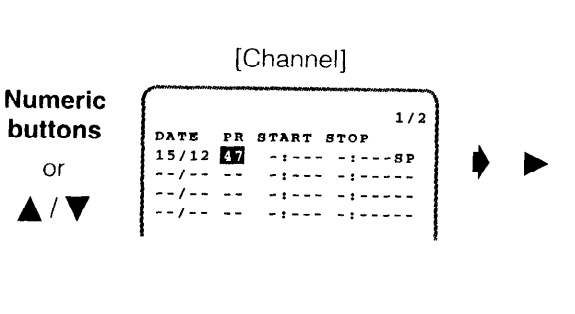
The timer can be set manually for automatic recording of up to 8 events over a 365 day period.

PREPARATION

- Load the cassette, ensuring the erasure protection hole is covered. The VCR power will automatically turn on.
- Check that the clock is displaying the correct time. (See **Setting the Clock** on page 11.)

PROCEDURE

Example: Recording channel position 47 in SP mode from 12:00 PM to 12:30 PM, December 15, 1997, if the present time is 10:28 (morning), December 14, 1997.

<p>[Menu]</p> 	<p>❶ Press the MENU button. Select the TIMER-setting mode and press the SET button.</p>
<p>[Timer position]</p>  <p>When the clock is set to 24H mode, "--:--" will appear.</p>	<p>❷ Select the timer position with the ▲/▼ buttons and press the SET button.</p> <ul style="list-style-type: none">• If the timer positions 1 to 4 have already been set, the screen changes 2/2 (timer positions 5 to 8).
<p>[Date]</p> <p>Numeric buttons or ▲/▼</p> 	<p>❸ Set the date for timer recording with the numeric or ▲/▼ buttons on the remote control and then press the ▶ button.</p> <ul style="list-style-type: none">• First set the "day" digits and then "month". If there is only one "day" or one "month" digit, enter a 0 first.
 <p>[Once]</p> <p>[Daily/Weekly]</p> <p>▲/▼ ▶</p>	<p>❹ If you want to record only once, press the ▶ button and go to step ❺. Otherwise, select "D (DAILY)" to record at the same time each day or "W (WEEKLY)" to record at the same time each week by pressing the ▲ or ▼ button, and then pressing the ▶ button.</p>
<p>[Channel]</p> <p>Numeric buttons or ▲/▼</p> 	<p>❺ Set the channel number using the numeric or ▲/▼ buttons and then press the ▶ button.</p> <p>NOTE ▶</p> <ul style="list-style-type: none">• To record audio and video from an external source through an AUDIO/VIDEO terminal on the VCR, press the ▲/▼ buttons to select an AV channel. (When an AV position is selected, "L1" or "L2" is displayed where a channel position number is usually displayed.) (VC-A260X and VC-A460X are only equipped with AUDIO/VIDEO (rear) terminals.)

NOTE

- **▲/▼** buttons can also be used to set the date and time instead of the numeric buttons.
- Press 0 first if the day, month, hour or minute is a single digit.

Continued on next page



<p>Numeric buttons or ▲ / ▼</p> <p>[Start]</p> <p>When the clock is set to 24H mode, "AM/PM" will not appear.</p>	<p>⑥ Set the start time with the numeric buttons or ▲ / ▼ buttons and press the ► button.</p>
<p>Numeric buttons or ▲ / ▼</p> <p>[Stop]</p>	<p>⑦ Set the stop time with the numeric buttons or ▲ / ▼ buttons and press the ► button.</p>
<p>[Tape Speed]</p> <p>NOTE</p> <ul style="list-style-type: none">• SP: Standard Play• LP: Long Play	<p>⑧ Select the tape speed with ▲ or ▼ button. (See Intelligent Timer Recording (JUST REC) on page 30.)</p>
<p>[Timer review]</p> <p>SET</p> <p>SET</p> <p>(○)</p>	<p>⑨ Press the SET button. To programme additional timer settings, repeat steps ③ through ⑧.</p>
<p>MENU</p> <p>○</p> <p>Normal Screen</p>	<p>⑩ To return to the Normal Screen, press the MENU button.</p>
<p>TIMER ON/OFF</p> <p>○</p> <p>TIMER ON/OFF</p> <p>(○)</p>	<p>⑪ To set the VCR for automatic timer recording, press the TIMER ON/OFF button and ensure the "☐" indicator lights on the VCR display.</p>

NOTE

- If the video cassette runs out before recording all the programmes, your VCR will stop, eject the cassette, and shut off automatically.
- If power is interrupted for more than 1 minute (power failure, etc.), all timer settings will be cancelled.
- If the **TIMER ON/OFF** button is pressed when there is no cassette loaded, "☐" flashes for 5 seconds, indicating that timer recording is not possible.
- If the **TIMER ON/OFF** button is pressed while a cassette with an uncovered erasure protection hole is loaded, "☐" flashes and the cassette is ejected.
- When "☐" is lit, regular VCR operation, clock setting and setting/cancelling/confirming timer positions are not possible. For regular VCR operation, clock setting and setting/cancelling/confirming timer positions, press the **TIMER ON/OFF** button to disengage the timer ("☐" disappears), and then turn on your VCR.
- During timer recording, the timer cannot be set.
- To terminate timer recording, press the **STOP** button during timer recording.
- If no buttons are pressed within one minute while setting a timer programme position, the mode automatically returns to the previous mode.
- If the same time is input for the start time and the stop time, the timer setting will be cancelled.



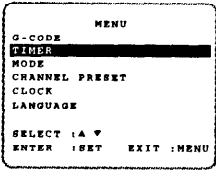



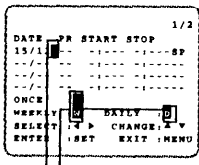








Confirming Timer Programmes

You can see on the On Screen Display a list of all timer programmes that are already set.

PREPARATION

- Turn on your TV and VCR and select the video channel on the TV.



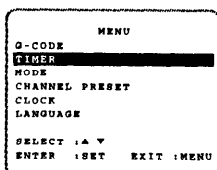




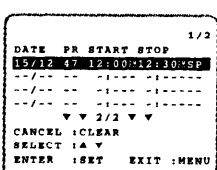

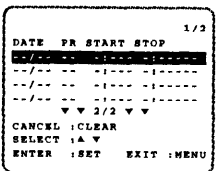


 →  or  →   ()	<p>① Press the MENU button. (If the "⏻" indicator on the VCR display is lit, cancel the timer standby mode by pressing the TIMER ON/OFF button and then turn on the power.)</p> <p>② Select the TIMER-setting mode with the ▲ / ▼ buttons and then press the SET button.</p>
<p>[Example]</p>  →  →   ()	<p>③ The screen for confirming programmes that have been set will appear.</p> <ul style="list-style-type: none">• Check the information displayed.• If you want to correct the data, select the programme to be changed with the ▲ / ▼ buttons and then press the SET button. Correct the setting as described on pages 27 and 28.
 → 	<p>④ To return to the Normal Screen, press the MENU button.</p> <ul style="list-style-type: none">• After checking or correcting the programme contents, press the TIMER ON/OFF button to enter the Timer Standby mode.

Cancelling Timer Programmes

Perform the following procedure to cancel timer programmes that have already been set.

PREPARATION

- Turn on your TV and VCR and select the video channel on the TV.

 →  or  →   ()	<p>① Press the MENU button. (If the "⏻" indicator on the VCR display is lit, cancel the timer standby mode by pressing the TIMER ON/OFF button and then turn on the power.)</p> <p>② Select the TIMER-setting mode with the ▲ / ▼ buttons and then press the SET button.</p>
 or 	<p>③ The screen for confirming timer recording programmes that have been set will appear.</p> <ul style="list-style-type: none">• Select the programme number you wish to cancel with the ▲ / ▼ buttons. (The selected programme will appear highlighted.)
 	<p>④ Double-check that it is the programme you wish to cancel, and press the CLEAR button. It will be cleared on the screen.</p> <p>NOTE ➤</p> <ul style="list-style-type: none">• Ensure that the remote control is in VCR mode. Press the VCR button.
 → 	<p>⑤ To return to the Normal Screen, press the MENU button.</p> <ul style="list-style-type: none">• If there are still some programmes set, press the TIMER ON/OFF button to enter the Timer Standby mode.

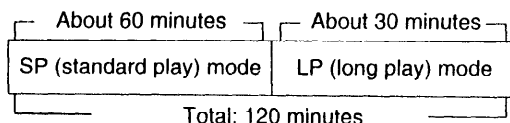


Intelligent Timer Recording (JUST REC)

When the tape is expected to run out halfway during timer recording in the SP (standard play) mode, the mode will automatically change to the LP (long play) mode to prevent termination of recording. This function works only when JUST REC mode on the MODE selection screen is set to ON.

For example:

- When a 120-minute programme is timer-recorded with a 90-minute tape while the automatic select is set to LP mode as shown below.



NOTE

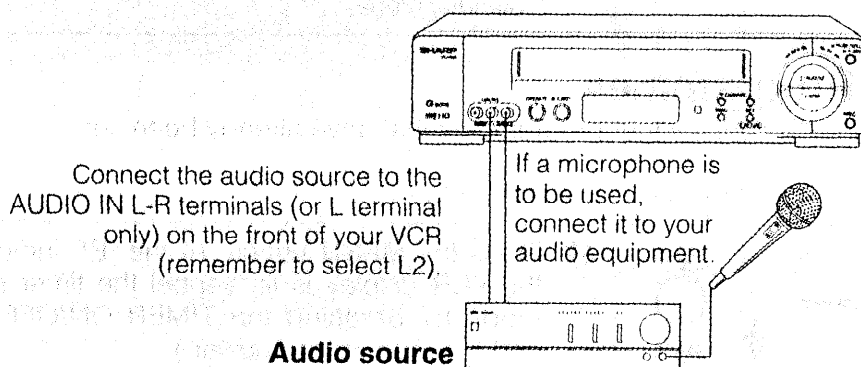
- This function may not properly work for video tapes other than E60, E90, E180 and E240.
- This tape may not be completely used up.
- When more than one programme is set on the timer, the automatic recording function will work for the length of each timer-set programme, but not for the total length of all programmes.
- When the LP mode is initially used for timer-recording a programme, if the tape is not long enough to record the entire length of the programme, the programme will not be entirely recorded.



Audio Dubbing (only for VC-H660X)

The VC-H660X allows you to add a narrative or background music to a pre-recorded tape.

- The audio signal will be recorded on the mono (linear) track. The Hi-Fi tracks remain unchanged.



- 1 Connect the audio source to the AUDIO IN L-R terminals (or L terminal only) on the front of the VCR as shown above. (The input terminals on the rear of the VCR cannot be used.)
- 2 Insert the pre-recorded tape into the VCR.
- 3 Press the **PLAY/x2** button to view the recording.
- 4 Press the **PAUSE/STILL** button when you reach the point on the tape where you want to begin audio dubbing.
- 5 Press the **A.DUB** button. ("A.DUB" and "L2" will be shown on the VCR display.)
- 6 Wait about 4 seconds and then press the **PAUSE/STILL** button to begin audio dubbing.
- 7 Press the **STOP** button to finish audio dubbing. ("A.DUB" will disappear from the VCR display.)



NOTES

- Do not press the **CHANNEL** \oplus/\ominus button during audio dubbing.
- Because the audio signal is recorded on the mono (linear) track, any previous recording on this track will be erased.
- If the Auto Tracking function is used during audio dubbing, the recorded audio may be distorted. Wait about 4 seconds before pressing the **PAUSE/STILL** button to begin audio dubbing in step 6.

Listening to an Audio Dubbed Tape

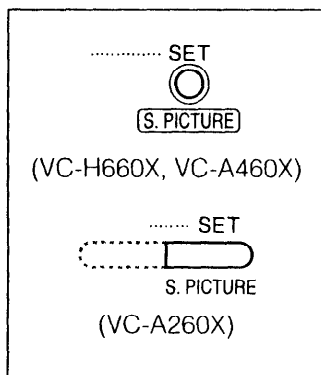
- Press the **AUDIO OUT** button on the remote control to select the desired audio output. (See the table below and refer to **AUDIO OUTPUT** on page 21.)
- If you want to listen to the original and dubbed audio signals simultaneously, set the AUDIO MIX mode to ON (see page 16).

AUDIO MIX	AUDIO OUT MODE	VCR DISPLAY	RESULT
OFF	Hi-Fi audio.	L R	Original Hi-Fi audio (L&R channels)
		L	Original Hi-Fi audio (L channel)
		R	Original Hi-Fi audio (R channel)
	Mono audio		Dubbed mono audio
ON	Hi-Fi and Mono audio	L R	Original Hi-Fi audio (L&R channels) plus dubbed mono audio.
		L	Original Hi-Fi audio (L channel) plus dubbed mono audio.
		R	Original Hi-Fi audio (R channel) plus dubbed mono audio.



New Sharp Super Picture

This function creates clearer modulation during playback for high picture quality.



Press the **S. PICTURE** button on the VCR.

"S.PICTURE ON (or OFF)" will appear on the TV screen for a few seconds. Each time the button is pressed, the mode switches between ON and OFF. (The New Sharp Super Picture is preset to ON at the factory.)

ON:

Normally leave the mode set to ON. This high picture quality function will create a clearer image during playback.

OFF:

Set to OFF when playing back a tape on the VCR while editing or when strong noise appears on the screen. Set to OFF when using the VCR as an editing source.

S. PICTURE ON

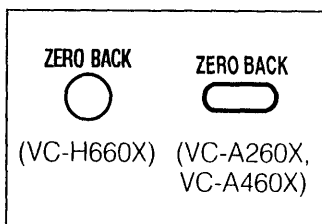
NOTE

- This function only operates during playback. It will not operate when recording or watching a TV programme with the VCR tuner.
- This function can not be set to ON/OFF with the MENU screen displayed.
- If power is interrupted for more than 60 seconds (power failure, etc.), the setting will return to ON.



Zero-Back Function

The zero-back function makes the cassette fast forward (or rewind) to the previously set "0:00.00" point and stop there.



- 1 Make sure the counter is displayed, then press the **CLEAR** button on the remote control at the point you wish to return to later. "0:00.00" is displayed.
- 2 Press the **ZERO BACK** button on the remote control. The VCR automatically detects the direction of the "0:00.00" position and fast forwards (or rewinds) the tape.
- 3 When the tape reaches the "0:00.00" position, the tape automatically stops.

NOTE

- The zero-back function does not operate during recording. The function works during the playback, stop, fast forward, rewind and video search modes.

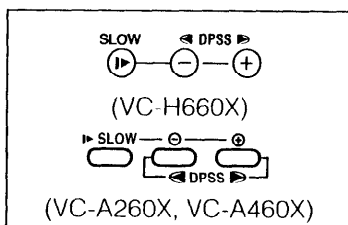
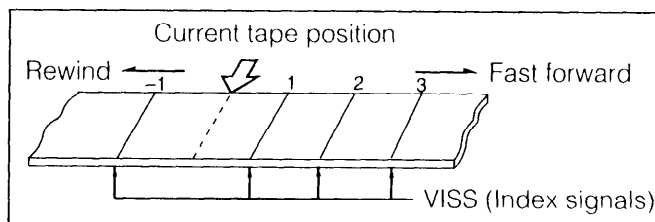


DPSS (Digital Programme Search System)

With this feature you can quickly locate a desired section of the tape. The DPSS feature makes use of VISS (index) signals to search for a specified tape segment and begin playback automatically.

VISS (Index) Signal

An VISS (index) signal is automatically recorded on the tape at the start of ordinary recording, simple recording timer and timer recording.



- 1 Load a tape containing VISS (index) signals into the VCR.
- 2 Select the VISS (index) number of the desired programme using the **DPSS** button on the remote control. Search starts immediately (When a signal is located, the displayed number decreases.)
- 3 When the selected VISS (index) signal-encoded section is found, playback begins automatically.

NOTE

- DPSS may not function properly if the VISS (index) signals are too close together (within 3 minutes of each other).
- DPSS can be cancelled by pressing the **PLAY/x2** or **STOP** button.
- If the tape reaches its end or is rewound completely before locating the desired VISS (index) signal, DPSS is cancelled.

- DPSS may not function for damaged or worn tapes.
- The DPSS function cannot be used with tapes that contain no VISS (index) signals.
- The starting point of a programme may vary slightly.
- DPSS does not operate during the slow, record, timer standby, and timer recording modes, or when there is no cassette loaded.

Auto Repeat

With this feature, the entire tape is played back repeatedly.

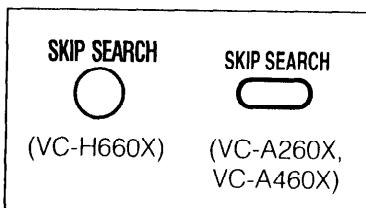
- 1 Set the REPEAT mode on the MODE-selection screen to ON.
When the video cassette reaches its end, the VCR will stop playback, rewind the tape, and automatically play it back again.

NOTE

- The ON/OFF status of the Auto Repeat can be checked on the MODE Selection screen. (See **Mode Selection** on page 16.) (And when the Auto Repeat is ON, "REPEAT" will be displayed on the OSD.)
- If the Auto Repeat is on and the tape is rewound to the beginning with rewind or reverse video search, the tape will automatically start playback.

COLOUR	AUTO	PAL
BLUE BACK	AUTO	OFF
AUTO RENTAL	ON	OFF
→REPEAT	ON	OFF
JUST REC	ON	OFF
AUDIO MIX	ON	OFF

Skip Search

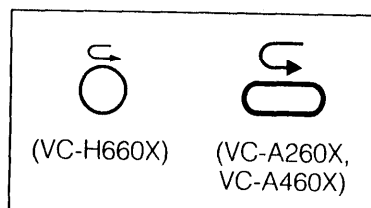



When the **SKIP SEARCH** button on the remote control is pressed during playback mode, the VCR will perform a forward video search for a fixed interval of playback time before resuming playback. Depending on how many times the button is pressed, it is possible to set the forward video search time to approx. 30, 60, 90 or 120 seconds of recorded material.

Number of Times Pressed	Forward Video Search Time	(On the VCR display)
1 time	Approx. 30 sec. (of playback time)	0:30
2 times	Approx. 60 sec. (of playback time)	1:00
3 times	Approx. 90 sec. (of playback time)	1:30
4 times	Approx. 120 sec. (of playback time)	2:00

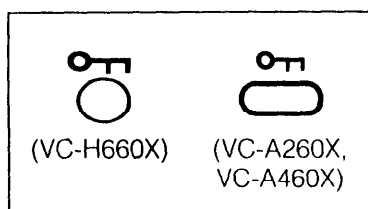
During skip search, the interval of the video search will flash on the display.

Instant Replay



When the  button on the remote control is pressed during playback, the VCR will perform a reverse video search for a fixed interval of playback time before resuming playback. Depending on how many times the button is pressed, it is possible to set the reverse video search time to approx. 20, 40, 60, or 80 seconds of recorded material.






New Child-Proof Lock





With this feature, you can lock all VCR modes to prevent accidental change.

This function works even when the VCR power is off, thus preventing children from operating the VCR or viewing select programmes while you are away from home.






New Child-Proof Lock

- 1 Press  on the remote control for about 2 seconds.
“” flashes and “---” lights on the VCR-function display.
- 2 Press  again.
“” remains lit on the VCR display confirming that New Child-Proof Lock has been activated.
- 3 Now regardless of what other operating buttons are touched, the VCR will continue to operate in the present mode.
(If New Child-Proof Lock is activated during playback, once the tape reaches its end, the VCR automatically rewinds the tape, ejects it, and turns the power off.)








Disengaging New Child-Proof Lock

- Press  button for about 2 seconds.
“” starts flashing and then disappears. Now, New Child-Proof Lock is disengaged.




Advanced New Child-Proof Lock

- 1 Press  button on the remote control for about 2 seconds.
“” flashes and “---” lights on the VCR display.
- 2 Input the personal code number (4 digit code) with the numbered buttons. The personal code number you have input is displayed on the VCR display.
- 3 Press  button again.
“” remains lit on the VCR display confirming that New Child-Proof Lock has been activated.
- 4 Now regardless of what other operating buttons are touched, the VCR will continue to operate in the present mode.
(If New Child-Proof Lock is activated during playback, once the tape reaches its end, the VCR automatically rewinds the tape, ejects it, and turns the power off.)


Disengaging Advanced New Child-Proof Lock

- 1 Press  button for about 2 seconds.
“” flashes and “---” lights on the VCR display.
- 2 Input the personal code number (4 digit code) you used to activate Advanced New Child-Proof Lock with the numbered buttons. The personal code number you have input is displayed on the VCR display.
- 3 Press  button again.
“” disappears. Now, New Child-Proof Lock is disengaged. If the code number is wrong, “---” is displayed on the VCR display. Retry to input the right code number. Press  button again.

If you forget your personal code number, you can disengage New Child-Proof Lock with the following procedure:

- 1 Press  button for about 2 seconds.
“” flashes and “---” lights on the VCR display.
- 2 Press the **OPERATE** buttons on both the VCR and remote control for at least 2 seconds. New Child-Proof Lock is disengaged.

NOTE

- If, while New Child-Proof Lock is on, you attempt to change modes by pressing another button, the “” indicator will flash on the VCR display.



VCR Display

When the **DISPLAY** button is pressed, the display changes in the following way. (However, the following is the case when the clock time is set and displayed in the 12-hour system.)

Example:

[TAPE REMAINING/CHANNEL]



Example:

[PRESENT TIME/CHANNEL]



Example:

[TAPE COUNTER/CHANNEL]



Example:

[OPERATING MODE/CHANNEL]



NOTE

- During timer recording or Simple Recording Timer, the display shows the record finish time. When the **DISPLAY** button is pressed, the display changes in the following way. (If the "⏏" indicator on the VCR display is lit, cancel the timer standby mode by pressing the **TIMER ON/OFF** button and then turn on the power.)

Example:

[RECORD FINISH TIME]



Example:

[COUNTER]



Example:

[OPERATING MODE]



Example:

[PRESENT TIME]



Example:

[REMAINING TIME]



NOTE

- During Simple Recording Timer recording, "⏏" lights.

Counter Clear

Make sure the counter is displayed, then press the **CLEAR** button on the remote control. "0:00.00" is displayed.

NOTE

- The counter will reset to "0:00.00" when the tape is rewound completely.



Tape Remaining Display

On Screen Display

- Select FULL or COUNTER display mode by pressing the **MODE OSD** button on the remote control.



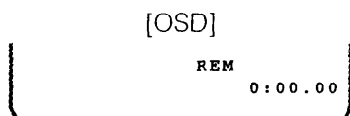
VCR Display

- Press the **DISPLAY** button on the remote control.



NOTE

- This function accurately displays the tape remaining only for tapes recorded in PAL mode. (It does not accurately display the tape remaining for tapes recorded in NTSC or MESECAM modes.)
- When you insert the tape and the VCR is in the stop mode, the tape remaining cannot be computed. The following indicator is shown when the tape remaining has not yet been computed or cannot be computed.



- When you start recording or playback, the VCR will begin the computation. However, this may take some time. When computation is completed, tape remaining will be shown on the OSD and VCR display for 5 seconds.
- If the "REM." mode is selected with the **MODE OSD** or **DISPLAY** button and the VCR is in stop mode, the tape will automatically fast forward or rewind for a few seconds and then the VCR will begin computing the amount of tape remaining.
- During computation, the **REC** button will not function, and pressing the **STOP**, **PLAY/×2**, or other buttons will interrupt the computation.
- Setting the DPSS or ZERO-BACK function during computation may cancel it.
- The indicated length of tape remaining is only an approximate guide.
- This function may not properly work for video tapes other than E60, E90, E180 and E240.
- The length of tape remaining during fast forward or rewind may be indicated as greater than it actually is.
- When **VHS** and **SVHS** tapes are used with a cassette adapter, the indication may not be correct.

Warning for the length of tape remaining

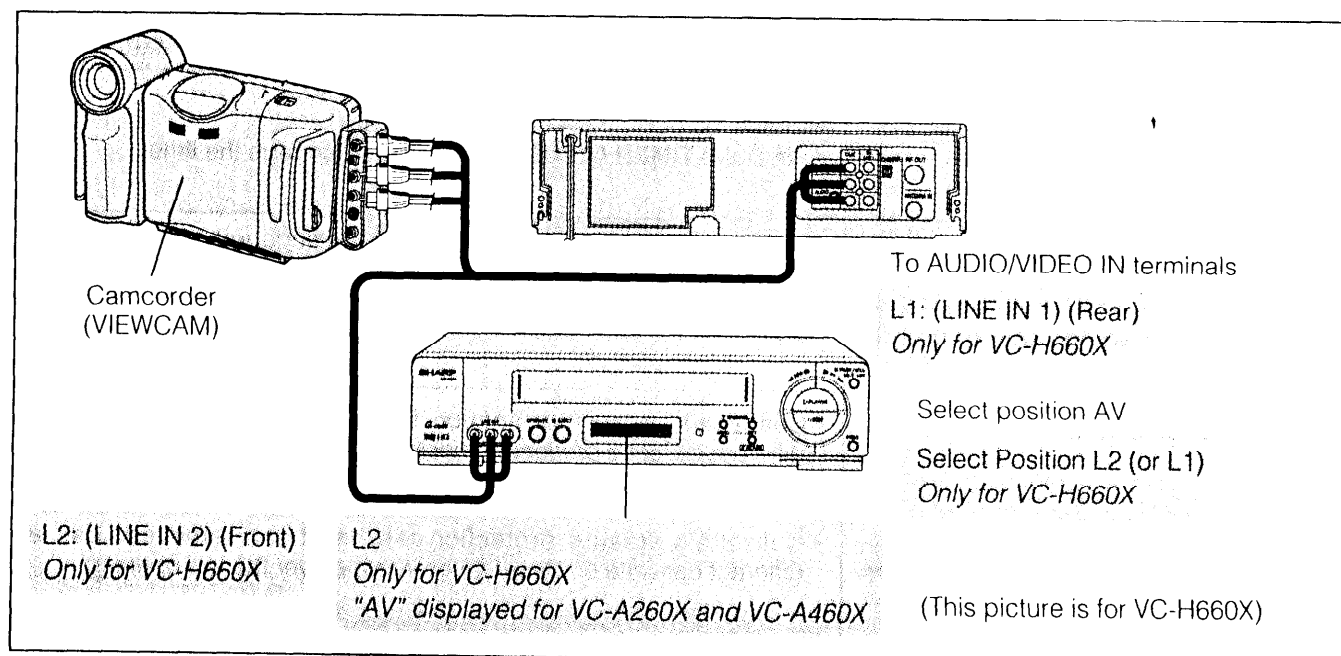
When the tape reaches the point where only about five minutes of recording time is left, the remaining length of tape will be automatically displayed, as a warning.

NOTE

- No warning, however, will be shown during timer recording or Simple Recording Timer recording.

Editing from a Camcorder to Your VCR

Editing from your Camcorder is extremely easy using your VCR with a linear tape counter, etc. The connection diagram below is for a guideline only. Refer to your Camcorder operation manual for precise connection information.



Specifications

- Format: VHS PAL standard
- Video recording system: Two rotary heads, helical scan
- Video signal system: PAL colour or monochrome signals: 625 lines
- Hi-Fi audio recording system
 - (Only for VC-H660X): Deep-layer recording system conforming to stereo Hi-Fi VHS standard
- Maximum playing time: 480 min. with E-240 video cassette in LP mode
- Tape width: 12.7 mm
- Tape speed: 23.39 mm/sec. SP; 11.70 mm/sec. LP
- Antenna: 75 Ohm unbalanced
- Reception channels: VHF channel 0 to 12, UHF channel 28 to 69
- RF output signal: UHF channel 31 to 40 (preset to 37)
- Power requirement: AC 240 V, 50 Hz
- Power consumption: 16 W (approx.) for VC-A260X/18 W (approx.) for VC-A460X/21 W (approx.) for VC-H660X
- Operating temperature: 5°C to 40°C
- Storage temperature: -20°C to 55°C
- Video input: 1.0 Vp-p, 75 Ohm
- output: 1.0 Vp-p, 75 Ohm
- Audio input: (phono type) Line: -8dBs, 47 kohm
- output: (phono type) Line: -8dBs, 1 kohm
- Hi-Fi audio (Only for VC-H660X): Dynamic range: Typically 90 dB
- Frequency response: 20 Hz-20 kHz
- Wow and flutter: less than 0.005% Wrm
- Dimensions: 360 (W) × 280 (D) × 94 (H) mm ---VC-A260X
- 360 (W) × 286 (D) × 94 (H) mm ---VC-A460X, VC-H660X
- Weight: 3.3 kg (VC-A260X)/ 3.4 kg (VC-A460X)/3.4 kg (VC-H660X)
- Supplied accessories: R6 (AA, UM/SUM-3) battery × 2, 75-ohm coaxial cable, operation manual, remote control unit

Design and specifications are subject to change without notice.



Before Calling for Service

Check this list before calling for service.

Problem	Possible Cause/Solutions
MISCELLANEOUS PROBLEMS	
<ul style="list-style-type: none">• No power. OPERATE button will not function.	<ul style="list-style-type: none">• Make sure the power cord is plugged in.• Check the outlet, fuse or circuit breaker.• Press the TIMER ON/OFF button and disengage the timer.
<ul style="list-style-type: none">• Cassette cannot be ejected.	
<ul style="list-style-type: none">• The VCR display does not operate properly.	<ul style="list-style-type: none">• Make sure that the Child-Proof Lock is not engaged.• Safety device in VCR is functioning. Unplug VCR and plug in again a few minutes and set the clock again. Set the timer again if necessary.
<ul style="list-style-type: none">• No operation when any button is pressed.	
<ul style="list-style-type: none">• VCR does not record.	<ul style="list-style-type: none">• Cassette's erasure protection tab has been removed. Use a different cassette or place adhesive tape over the tab opening.• Check if a cassette is loaded.
<ul style="list-style-type: none">• Cassette is automatically ejected when pressing REC, or TIMER ON/OFF button.	<ul style="list-style-type: none">• Cassette's erasure protection tab has been removed. Use a different cassette or place adhesive tape over the tab opening.
<ul style="list-style-type: none">• No tape movement.	<ul style="list-style-type: none">• Make sure VCR is not in pause/still mode.• Make sure tape has not reached the beginning or end.
<ul style="list-style-type: none">• Cassette cannot be loaded.	<ul style="list-style-type: none">• Make sure there is no other cassette inside.• Make sure the cassette is properly positioned and reinsert.
<ul style="list-style-type: none">• Picture does not change even though CHANNEL ⊕/⊖ buttons are pressed.	<ul style="list-style-type: none">• Make sure the VCR is not in the timer setting or clock setting mode.• Make sure the VCR is not in the channel setting mode.
<ul style="list-style-type: none">• Desired channel position cannot be selected.	<ul style="list-style-type: none">• The channel has been set to be skipped. Cancel the skip mode for that channel.
NO COLOUR OR POOR PICTURE	
<ul style="list-style-type: none">• No colour or poor TV picture on normal viewing.	<ul style="list-style-type: none">• Make sure all the cables are connected properly.• Make sure the VCR power cord is properly plugged in.
<ul style="list-style-type: none">• Snowy picture appears on TV during playback.	<ul style="list-style-type: none">• Adjust the CHANNEL ⊕/⊖ buttons or try a different cassette.• The heads may be dirty from condensed moisture or the magnetic coating of the video tape. (If this is the case, the heads need to be cleaned. Ask the retailer or Sharp approved service centre.)
<ul style="list-style-type: none">• No picture appears or colour is not correct during playback.	<ul style="list-style-type: none">• Make sure the TV is set to the same channel as the VCR RF converter output channel adjuster.• Check all connecting cables.
REMOTE CONTROL PROBLEM	
<ul style="list-style-type: none">• The VCR cannot be operated by the remote control.	<ul style="list-style-type: none">• Make sure VCR operate button has been activated.• The remote control unit is too far away from the main unit.• The remote control unit is not pointed correctly at the photoreceptor window.• The batteries are exhausted.• The batteries have not been inserted in the correct direction (+ / - polarity).

This unit is equipped with a microprocessor. Its performance could be adversely affected by external electrical noise or interference. If this should happen, unplug the VCR and plug it in again after a few minutes.

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